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Synopsis of the Parasites of Vertebrates of Canada

Ectoparasites of Terrestrial Mammals

Murray J. Kennedy

Robert A. Newman

Alberta
AGRICULTURE
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Robert A. Newman

Alberta Agriculture
Veterinary Laboratory
6909 - 116 Street,
Edmonton, Alberta
Canada
T6H 4P2

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Abstract

This synopsis contains Parasite-Host and Host-Parasite lists of 323 species of ectoparasites from 122 species of terrestrial mammals. The 323 species of ectoparasites are distributed among higher taxa as follows: Acari - 122; Coleoptera - 4; Diptera - 19; Hemiptera - 1; Mallophaga - 19; Siphonaptera - 134; and Siphunculata - 23.

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PARASITE-HOST LIST

Introduction

The compiled information covers the period from 1876 to December, 1985, and was extracted from numerous publications in the primary scientific literature. Journal series such as The Canadian Entomologist, Canadian Journal of Zoology, Journal of Wildlife Diseases and the Journal of Parasitology were searched in their entirety. Abstracting series such as Zoological Record and Entomology Abstracts were scanned for additional references. Theses and reports of federal and provincial governments, and of other institutions, were not searched extensively, hence some existing records may have been missed.

In providing references to the parasite-host-distribution data, we included only reports based on original records, but screening all reports to ensure complete exclusion of repetitive records based on the same material was not possible. Publications that do not provide original parasite-host-distribution records but deal with some aspect of Canadian ectoparasites are compiled in a supplementary list of references. References dealing only with experimental infections, or with specimens collected from the ground, nests or burrows, or from dead carcasses are generally not included. If they were, a note was added in the remarks section.

The synopsis indicates that up to December, 1985, at least 322 species of ectoparasites have been reported from 122 species of terrestrial mammals. Parasites not identified to the species level are not included in the total number. The 322 species are divided among seven major taxa as follows: Acari - 122; Coleoptera - 4; Diptera - 19; Hemiptera - 1; Mallophaga - 19; Siphonaptera - 134; and Siphunculata - 23.

The taxonomic arrangement adopted for each major taxonomic group of ectoparasite included in Canadian records, in most cases, is as follows:

Acari - Krantz 1978
Coleoptera - Arnett 1968
Diptera - Arnett et al. 1980
Mallophaga - Emerson 1972
Siphonaptera - Holland 1984
Siphunculata - Stojanovich and Pratt 1965

All scientific names of North American mammals are given in the form used by Hall (1981). The entries in the synopsis are organized in accordance with the format used by Margolis and Arthur (1979) in their *Synopsis of the Parasites of Fishes of Canada.*

The Parasite-Host List is organized by higher taxa of ectoparasite in the following order: Acari, Coleoptera, Diptera, Hemiptera, Mallophaga, Siphonaptera, and Siphunculata. Species, genera, and family names are listed in alphabetical order within their respective next higher taxon, which in the case of a family is either a suborder or an order, depending on the group in question and the usefulness of including the suborder or order category.

For each parasite species listed, the following information is provided:

1) The current *scientific name*, including author(s) and date(s), followed by any recognized synonyms that were used in establishing the Canadian record(s). No attempt was made to evaluate systematically the validity of published records, but attention is drawn to obvious errors.
2) The *site* of occurrence of the ectoparasite on its host(s) is assumed to be the skin for the Acari, Coleoptera, Hemiptera, Mallophaga, Siphonaptera, and Siphunculata. The larval stages of the Diptera are usually found in subcutaneous tissues or air passages of their hosts. Comments on additional sites, or aberrant sites are given in the remarks section.
3) The *hosts.* Numbers in parentheses after each host name correspond with the numbers assigned to the references establishing the particular parasite-host records. Holland (1984) corrected some host identifications for the Siphonaptera made by previous authors. For the most part we have used Holland's corrections. For example, Wagner (1936a) recorded *Foxella ignota recula* from *Mustela suturata.* Holland's correction for this host is *Mustela frenata nevadensis.*
4) *Distribution (Dist.)* Species distribution is indicated by provincial or territory boundaries listed in alphabetical order as follows: Alta (Alberta), BC (British Columbia), Man (Manitoba), NB (New Brunswick), Nfld (Newfoundland), NS (Nova Scotia), NWT (Northwest Territories), Ont (Ontario), PEI (Prince Edward Island), Que (Quebec), Sask (Saskatchewan), and YT (Yukon Territory).
5) Authors responsible for the published *records* are listed in chronological order. To enable the reader to grasp at a glance the author(s) responsible for particular parasite-host-locality records, we numbered the references listed under "Records" and placed the corresponding number(s) after the host name, and each reference is followed by the locality or localities from which the parasite was (were) reported. When only one host is listed for a particular parasite, the references are not numbered, and when all records are from the same locality, the latter was not listed after the authors' names.
6) Under *remarks*, explanatory comments, as required, are offered on systematics, nomenclature, misidentifications, and synonyms of parasites; and on the hosts, sites on or within hosts, and validity of previous records.

In the Host-Parasite List, within each order, the families, genera, and species are listed alphabetically. After the name of each parasite species, its geographic distribution on the host in question is given in parentheses.

The REFERENCES are given in two parts, the first includes those directly referred to in the text, and the second, SUPPLEMENTARY REFERENCES, contains a list of publications dealing with various aspects of parasites of wild mammals of Canada but which do not contain original parasite-host records.

To facilitate access to information in the parasite-host and host-parasite lists, the publication concludes with an INDEX to parasite and host scientific names.

Obviously a book of this sort is bound to have errors and ambiguities, and certainly such faults are our responsibility. We hope readers will bring them to our attention. We also hope that colleagues will send us reprints of their current work or papers we missed so that these additions or correc-

tions can be included in future revisions of the synopsis.

In a sense, this book constitutes a plea and encouragement for more work on our poorly known parasite fauna. We hope this synopsis will kindle interest and raise questions in the minds of future investigators in parasitology.

PHYLUM CHELICERATA

CLASS ARACHNIDA

SUBCLASS ACARI

ORDER ACARIDIDA

Family GLYCYPHAGIDAE

Dermacarus hylandi Fain, 1969
Syn.: *Radfordia hylandi*
Hosts: *Microtus chrotorrhinus*
M. pennsylvanicus
Synaptomys borealis
S. cooperi
Tamias striatus
Dist.: NB
Record: Whitaker and French 1982

Dermacarus hypudaei (Koch, 1941)
Host: *Napaeozapus insignis*
Dist.: NS
Record: Wright 1979

Dermacarus hypudaei septentrionalis (Koch, 1941)
Hosts: *Clethrionomys gapperi*
Tamiasciurus hudsonicus
Dist.: Que
Record: Gyorkos and Hilton 1982

Dermacarus jonesi Fain and Whitaker, 1976
Host: *Peromyscus maniculatus*
Dist.: BC
Record: Fain and Whitaker 1976

Dermacarus newyorkensis Fain, 1969
Hosts: *Napaeozapus insignis* (2, 3)
Tamiasciurus hudsonicus (1)
Zapus hudsonius (2, 3)
Dist.: NB, NS, PEI, Que
Records: 1. Gyorkos and Hilton 1982 (Que); 2. Jones and Thomas 1982 (NB, NS, PEI); 3. Whitaker and French 1982 (NB)

Dermacarus ondatrae Rupes and Whitaker, 1968
Host: *Ondatra zibethicus*
Dist.: Man, NS
Records: McKenzie and Welch 1979 (Man); Wright 1979 (NS)

Dermacarus sciurinus (Koch)
Host: *Tamiasciurus hudsonicus*
Dist.: Que
Record: Gyorkos and Hilton 1982

Dermacarus validus (Banks)
Host: *Ondatra zibethicus osoyoosensis*
Dist.: BC
Record: Knight 1951

Dermacarus sp.
Host: *Peromyscus maniculatus*
Dist.: NB
Record: Whitaker and French 1982

Glycyphagus hypudaei (Koch, 1941)
Hosts: *Clethrionomys gapperi*
Condylura cristata
Microtus chrotorrhinus
M. pennsylvanicus
Napaeozapus insignis
Peromyscus maniculatus
Sorex fumeus
S. gaspensis
S. palustris
Synaptomys borealis
S. cooperi
Dist.: NB
Record: Whitaker and French 1982

Orycteroxenus canadensis Fain, Kok, Lukoschus and Clulow, 1971
Hosts: *Condylura cristata*
Microsorex hoyi
Microtus chrotorrhinus
Dist.: NB
Record: Whitaker and French 1982

Orycteroxenus soricis Oudemans, 1915
Hosts: *Blarina brevicauda* (2)
Condylura cristata (2)
Microsorex hoyi (2)
Microtus chrotorrhinus (2)
Sorex cinereus (2)
S. fumeus (2)
S. gaspensis (2)
S. palustris (2)
Synaptomys borealis (2)
Zapus hudsonius (1)
Dist.: NB, NS
Records: 1. Jones and Thomas 1982 (NS); 2. Whitaker and French 1982 (NB)

Xenoryctes latiporus Fain and Whitaker, 1979
Hosts: *Blarina brevicauda*
Zapus hudsonius
Dist.: NB
Record: Whitaker and French 1982

Xenoryctes nudus Fain and Whitaker, 1975
Hosts: *Condylura cristata*
Sorex fumeus
Dist.: NB
Record: Whitaker and French 1982

Unidentified Glycephagidae

Glycephagidae gen. spp.
Hosts: *Clethrionomys gapperi*
Microtus pennsylvanicus
Peromyscus maniculatus
Sorex cinereus
S. palustris
Tamiasciuris hudsonicus
Dist.: Ont
Record: Scholten et al. 1962

Family LISTROPHORIDAE

Listrophorus americanus Radford, 1944
Hosts: *Ondatra zibethicus* (2)
O. z. osoyoosensis (1)
Dist.: BC, Man
Records: 1. Knight 1951 (BC); 2. McKenzie and Welch 1979 (Man)

Listrophorus dicrostonyx Fain and Hyland, 1972
Host: *Dicrostonyx* sp.
Dist.: NWT
Record: Fain and Hyland 1974

Listrophorus leuckarti Pagenstecher, 1861
Host: *Microtus p. pennsylvanicus*
Dist.: Ont
Record: McDaniel et al. 1967

Listrophorus mexicanus Fain, 1970
Hosts: *Clethrionomys gapperi* (1, 3)
Microtus chrotorrhinus (3)
M. pennsylvanicus (3)
Napaeozapus insignis (2)
Synaptomys cooperi (3)
Zapus hudsonius (2)
Dist.: NB, NS, PEI, Que
Records: 1. Gyorkos and Hilton 1982 (Que); 2. Jones and Thomas 1982 (NS, PEI, Que); 3. Whitaker and French 1982 (NB)

Listrophorus mexicanus squamiferus Fain and Hyland, 1972
Host: *Microtus pennsylvanicus*
Dist.: NWT
Record: Fain and Hyland 1974

Listrophorus ondatrae Fain, Kok, and Lukoschus, 1970
Host: *Ondatra zibethicus*
Dist.: NWT
Record: Fain 1970

Listrophorus phenacomys Fain and Hyland, 1972
Hosts: *Phenacomys intermedius*
Phenacomys sp.
Dist.: Man, NWT
Record: Fain and Hyland 1974

Listrophorus synaptomys (Fain, Whitaker McDaniel, and Lukoschus)
Hosts: *Synaptomys borealis*
S. cooperi
Dist.: NB
Record: Whitaker and French 1982

Listrophorus validus Banks, 1909
Host: *Ondatra zibethicus*
Dist.: Ont
Records: Banks 1909; Jarvis 1910

Listrophorus spp.
Host: *Blarina brevicauda*
Dist.: Ont
Record: Jameson 1950

Lynxacarus mustelae (Megnin, 1885) Fain and Hyland, 1974
Syn.: *Listrophorus mustelae* Megnin, 1885
Host: *Martes americana abietinoides*
Dist.: BC
Record: Cowan 1955

Prolabidocarpus canadensis Lawrence, 1948
Host: *Castor canadensis*
Dist.: Ont
Record: Lawrence 1948

Unidentified Listrophoridae

Listrophoridae gen. spp.
Hosts: *Clethrionomys gapperi*
Microtus pennsylvanicus
Dist.: Ont
Record: Scholten et al. 1962

Family MYOCOPTIDAE

Gliricoptes zapus Fain and Whitaker, 1974
Host: *Napaeozapus insignis*
Dist.: NB
Record: Whitaker and French 1982

Gliricoptes spp.
Hosts: *Napaeozapus insignis*
Tamiasciurus hudsonicus
Dist.: Que
Record: Gyorkos and Hilton 1982
Remarks: Gyorkos and Hilton's (1982) specimens were near *G. glirinus* (Canestrini).

Myocoptes japonensis canadensis Radford, 1955
Syn.: *Myocoptes canadensis* Radford, 1955
Host: *Dicrostonyx* spp.
Dist.: Ont
Record: Radford 1955

Myocoptes japonensis japonensis Radford, 1955
Hosts: *Clethrionomys gapperi*
Microtus chrotorrhinus
M. pennsylvanicus
Dist.: NB
Record: Whitaker and French 1982

Myocoptes squamosus Fain, Munting, and Lukoschus, 1969
Hosts: *Clethrionomys gapperi*
Microtus chrotorrhinus
M. pennsylvanicus
Dist.: NB
Record: Whitaker and French 1982

Myocoptes spp.
Hosts: *Blarina brevicauda* (1)
Clethrionomys gapperi (3)
C. rutilus (2)
Peromyscus maniculatus (3)
Tamias striatus (3)
Dist.: NWT, Ont, Que
Records: 1. Jameson 1950 (Ont); 2. Mitchell and Behin 1965 (NWT); 3. Gyorkos and Hilton 1982 (Que)

Remarks: Gyorkos and Hilton (1982) noted that their specimens from *P. maniculatus* were near *Myocoptes musculinus;* those from *C. gapperi* were near *M. ondatrae;* and those from *T. striatus,* and some from *C. gapperi,* were immature.

Trichoecius tenax (Michael, 1889) Fain, Munting, and Lukoschus, 1969
Syn.: *Myocoptes tenax* Michael, 1889
Hosts: *Clethrionomys gapperi*
Microtus chrotorrhinus
M. pennsylvanicus
Dist.: NB
Record: Whitaker and French 1982

Trichoecius spp.
Hosts: *Microtus chrotorrhinus*
Peromyscus maniculatus
Dist.: NB
Record: Whitaker and French 1982

Family PSOROPTIDAE

Chorioptes texanus Hirst, 1924
Host: *Rangifer tarandus*
Dist.: NWT
Record: Sweatman 1958a

Otodectes cynotis (Hering, 1838) Canestrini, 1894
Hosts: *Odocoileus virginianus*
Vulpes vulpes
Dist.: Alta, Que
Record: Sweatman 1958b

Remarks: The mites were recovered from the ear canal.

Psoroptes ovis (Hering, 1838)
Host: *Ovis canadensis*
Dist.: Alta
Record: Cowan 1944

Family SARCOPTIDAE

Sarcoptes scabiei (Linnaeus, 1758)
Hosts: *Canis latrans*
C. lupus
Vulpes vulpes
Dist.: Alta
Record: Samuel 1981

Unidentified Sarcoptidae

Sarcoptidae gen. spp.
Hosts: *Clethrionomys gapperi*
Tamias striatus
Dist.: Ont
Record: Scholten et al. 1962

SUBORDER ACTINEDIDA

Family CHEYLETIDAE

Cheyletiella parasitivorax (Megnin, 1878)
Host: *Lepus americanus*
Dist.: Ont
Record: Cooper 1946

Family MYOBIIDAE

Amorphacarus hengererorum Jameson, 1948
Hosts: *Blarina brevicauda*
Microsorex hoyi
Sorex cinereus
S. fumeus
S. gaspensis
S. palustris
Dist.: NB
Record: Whitaker and French 1982

Blarinobia simplex (Ewing, 1938)
Syn.: *Myobia simplex* Ewing, 1938
Host: *Blarina brevicauda*
Dist.: NB, Ont
Records: 1. Jameson 1948 (Ont), 2. 1950 (Ont); 3. Whitaker and French 1982 (NB)

Eadiea condylurae Jameson, 1949
Host: *Condylura cristata*
Dist.: NB
Record: Whitaker and French 1982

Myobia caudata Banks, 1909
Host: Little brown bat
Dist.: Ont
Record: 1. Banks 1909; 2. Jarvis 1910;

Myobia musculi (Schrank, 1781)
Host: House mouse
Dist.: Ont
Record: Jarvis 1910

Myobia spp.
Hosts: *Clethrionomys gapperi* (3)
Microtus pennsylvanicus (3)
Napaeozapus insignis (3)
Peromyscus maniculatus (3)
Peromyscus spp. (1)
Sorex cinereus (2)
Dist.: BC, NS, Que
Records: 1. Spencer 1940 (BC); 2. Wright 1979 (NS); 3. Gyorkos and Hilton 1982 (Que)

Protomyobia americana McDaniel, 1967
Hosts: *Blarina brevicauda*
Microsorex hoyi
Dist.: NB
Record: Whitaker and French 1982

Protomyobia brevisetosa Jameson, 1948
Hosts: *Microtus pennsylvanicus*
Sorex fumeus
Dist.: NB
Record: Whitaker and French 1982

Protomyobia claparedei (Poppe, 1896)
Hosts: *Blarina brevicauda* (1, 2)
Sorex cinereus (3)
S. palustris (3)
Dist.: NB, Ont
Records: 1. Jameson 1948 (Ont), 2. 1950 (Ont); 3. Whitaker and French 1982 (NB)

Radfordia ewingi (Fox, 1937)
Hosts: *Napaeozapus insignis* (1, 2)
Zapus hudsonius (1)
Dist.: NB, PEI
Records: 1. Jones and Thomas 1982 (NB, PEI); 2. Whitaker and French 1982 (NB)

Radfordia lemnina (Koch, 1841)
Host: *Clethrionomys gapperi*
Dist.: NB
Record: Whitaker and French 1982

Radfordia subuliger Ewing, 1938
Hosts: *Peromyscus maniculatus* (2)
P. m. austerus (1)
Dist.: BC, NB
Records: 1. Spencer 1940 (BC); 2. Whitaker and French 1982 (NB)

Radfordia spp.
Hosts: *Clethrionomys gapperi* (3)
Microtus chrotorrhinus (4)
M. pennsylvanicus (3)
Ondatra zibethicus osoyoosensis (2)
Peromyscus maniculatus (3)
Rattus norvegicus (1)
Dist.: BC, NB, Que
Records: 1. Firlotte 1948 (Que); 2. Knight 1951 (BC); 3. Gyorkos and Hilton 1982 (Que); 4. Whitaker and French 1982 (NB)

Remarks: Knight's (1951) specimens closely resembled *R. lemnina.* The *Radfordia* sp. from *C. gapperi* and *M. pennsylvanicus* was close to *R. lemnina;* those from *P. maniculatus* were immature (Gyorkos and Hilton 1982).

Unidentified Myobiidae

Myobiidae gen. spp.
Hosts: *Blarina brevicauda*
Clethrionomys gapperi
Microtus pennsylvanicus
Mus musculus
Peromyscus maniculatus
Sorex cinereus
Zapus hudsonius
Dist.: Ont
Record: Scholten et al. 1962

Family PSORERGATIDAE

Psorergates canadensis Kok, Lukoschus, and Clulow, 1971
Host: *Microtus pennsylvanicus*
Dist.: Man, Ont
Record: Kok et al. 1971

Remarks: The specimens were found only in the ear concha and on the hind legs.

Psorergates cinereus Kok, Lukoschus, and Clulow, 1971
Host: *Sorex cinereus*
Dist.: Man, Ont
Record: Kok et al. 1971

Remarks: The specimens were found only in the ear concha and on the hind legs.

Psorergates simplex Tyrrell, 1883
Host: Mouse
Dist.: unspecified
Record: Tyrrell 1883

Remarks: Found in the ear.

Psorergates watsoni Kok, Lukoschus, and Clulow, 1971
Host: *Peromyscus maniculatus*
Dist.: Ont
Record: Kok et al. 1971

Remarks: The specimens were found only in the ear concha and on the hind legs.

Psorergates spp.
Hosts: Field mouse
House mouse
Dist.: Ont
Record: Jarvis 1910

Psorobia castoris Kok, Lukoschus, and Clulow, 1970
Host: *Castor canadensis*
Dist.: Ont
Record: Kok et al. 1970

Family PYGMEPHORIDAE

Bakerdania spp.
Hosts: *Blarina brevicauda*
Microsorex hoyi
Microtus chrotorrhinus
Peromyscus maniculatus
Sorex cinereus
S. fumeus
S. gaspensis
Synaptomys cooperi
Dist.: NB
Record: Whitaker and French 1982

Pygmephorus horridus Mahunka, 1973
Hosts: *Blarina brevicauda*
Clethrionomys gapperi
Condylura cristata
Microsorex hoyi
Microtus chrotorrhinus
Napaeozapus insignis
Sorex cinereus
S. fumeus
S. gaspensis
S. palustris
Synaptomys borealis
S. cooperi
Dist.: NB
Record: Whitaker and French 1982

Pygmephorus johnstoni Smiley and Whitaker, 1979
Host: *Blarina brevicauda*
Dist.: NB
Record: Whitaker and French 1982

Pygmephorus lutterloughae Smiley and Whitaker, 1979
Hosts: *Blarina brevicauda*
Condylura cristata
Dist.: NB
Record: Whitaker and French 1982

Pygmephorus mahunkai Smiley and Whitaker, 1979
Hosts: *Myotis lucifugus* (2)
Napaeozapus insignis (1)
Zapus hudsonius (1)
Dist.: NS, PEI
Records: 1. Jones and Thomas 1982 (NS, PEI), 2. 1983 (PEI)

Pygmephorus moreohorridus Mahunka, 1975
Hosts: *Blarina brevicauda*
Condylura cristata
Microsorex hoyi
Microtus pennsylvanicus
Sorex cinereus
S. fumeus
S. gaspensis
S. palustris
Dist.: NB
Record: Whitaker and French 1982

Pygmephorus nidicolus Mahunka, 1969
Hosts: *Blarina brevicauda*
Sorex gaspensis
Dist.: NB
Record: Whitaker and French 1982

Pygmephorus whitaker, Mahunka, 1973
Hosts: *Blarina brevicauda*
Sorex cinereus
S. fumeus
S. gaspensis
Dist.: NB
Record: Whitaker and French 1982

Pygmephorus spp.
Hosts: *Blarina brevicauda* (2)
Dicrostonyx groenlandicus (1)
Sorex fumeus (2)
Dist.: NB, NWT
Records: 1. McAlpine 1965 (NWT); 2. Whitaker and French 1982 (NB)

Family TROMBICULIDAE

Comatacarus americanus Ewing, 1942
Host: *Blarina brevicauda*
Dist.: Ont
Record: Jameson 1950

Euschoengastia blarinae (Ewing, 1931)
Hosts: *Blarina brevicauda* (1)
Clethrionomys gapperi (2)
Microtus chrotorrhinus (2)
Sorex cinereus (1)
S. fumeus (1)
Dist.: NB, Ont
Record: 1. Jameson 1950 (Ont); 2. Whitaker and French 1982 (NB)

Euschoengastia setosa (Ewing, 1937)
Hosts: *Microtus chrotorrhinus* (2)
Peromyscus maniculatus (2)
Tamias striatus (1)
Dist.: NB, Que
Record: 1. Gyorkos and Hilton 1982 (Que); 2. Whitaker and French 1982 (NB)

Euschoengastia spp.
Hosts: *Clethrionomys gapperi* (2)
Microtus pennsylvanicus (1, 2)
Dist.: NS, Sask
Records: 1. Wilson 1967 (Sask); 2. Wright 1979 (NS)
Remarks: Wilson (1967) stated that his material was close to *E. campi* Brown and Brennan and *E. sciuricola* (Ewing).

Eutrombicula harperi Ewing, 1928
Host: *Ondatra zibethicus osoyoosensis*
Dist.: BC
Record: Knight 1951

Miyatrombicula esoensis Sasa and Ogata, 1953
Hosts: *Blarina brevicauda* (2)
Clethrionomys gapperi (2)
Microsorex hoyi (2)
Microtus chrotorrhinus (2)
M. pennsylvanicus (2)
Napaeozapus insignis (1, 2)
Peromyscus maniculatus (2)
Sorex cinereus (2)
S. fumeus (2)
S. gaspensis (2)
S. palustris (2)
Synaptomys borealis (2)
S. cooperi (2)
Tamias striatus (2)
Dist.: NB, PEI
Records: 1. Jones and Thomas 1982 (PEI); 2. Whitaker and French 1982 (NB)

Neotrombicula basignata (Hirst, 1925)
Hosts: *Lepus americanus*
Microtus pennsylvanicus
Dist.: NS
Record: Wright 1979

Neotrombicula harperi (Ewing, 1928)
Hosts: *Clethrionomys gapperi* (2)
Microtus chrotorrhinus (2)
M. pennsylvanicus (2)
Napaeozapus insignis (1, 2)
Sorex cinereus (2)
Synaptomys cooperi (2)
Tamias striatus (2)
Zapus hudsonius (1)
Dist.: NB, NS, PEI, Que
Records: 1. Jones and Thomas 1982 (NB, NS, PEI, Que); 2. Whitaker and French 1982 (NB)

Neotrombicula lipovskyi Brennan and Wharton, 1950
Host: *Zapus hudsonius*
Dist.: NB
Record: Jones and Thomas 1982

Neotrombicula microti (Ewing, 1928)
Hosts: *Blarina brevicauda* (1)
Clethrionomys gapperi (1, 3)
Microtus pennsylvanicus (1)
Napaeozapus insignis (1, 2)
Ondatra zibethicus (1)
Peromyscus leucopus (1)
Tamiasciurus hudsonicus (1)
Zapus hudsonius (1)
Dist.: NB, NS, Que
Records: 1. Wright 1979 (NS); 2. Jones and Thomas 1982 (NS, Que); 3. Whitaker and French 1982 (NB)

Trombicula jamesoni Brennan, 1948
Host: *Blarina brevicauda*
Dist.: Ont
Record: Jameson 1950

Trombicula spp.
Hosts: *Clethrionomys gapperi* (2, 3)
Peromyscus leucopus (2)
P. maniculatus austerus (1)
Tamiasciurus hudsonicus (3)
Dist.: BC, NS, Que
Records: 1. Spencer 1940 (BC); 2. Wright 1979 (NS); 3. Gyorkos and Hilton 1982 (Que)

Unidentified Trombiculidae

Trombiculidae gen. spp.
Hosts: *Clethrionomys gapperi*
Odocoileus virginianus
Peromyscus maniculatus
Tamiasciurus hudsonicus
Tamias striatus
Zapus hudsonius
Dist.: Ont
Record: Scholten et al. 1962

Family TROMBIDIIDAE

Allothrombium spp.
Host: *Microtus pennsylvanicus*
Dist.: NS
Record: Wright 1979

Neoschongastia blarinae (Ewing, 1929)
Host: Streator's red squirrel
Dist.: BC
Record: Spencer 1940

ORDER PARASITIFORMES

SUBORDER GAMASIDA

Family DERMANYSSIDAE

Liponyssus montanus (Ewing, 1923)
Hosts: *Spermophilus richardsonii*
S. tridecemlineatus
Dist.: Man
Record: McLeod 1933

Liponyssus occidentalis (Ewing, 1923)
Syn.: *Ceratonyssus occidentalis* (Ewing, 1923)
Hosts: *Myotis l. lucifugus* (2)
Spermophilus richardsonii (1)
S. tridecemlineatus (1)
Bats (3)
Dist.: BC, Man, Ont
Record: 1. McLeod 1933 (Man); 2. Dymond 1938 (Ont); 3. Spencer 1939 (BC)

Liponyssus spp.
Hosts: *Condylura cristata* (1)
Bats (2)
Streator's red squirrel (3)
Dist.: BC, Ont
Records: 1. Jarvis 1910 (Ont); 2. Spencer 1939a (BC), 3. 1940 (Ont)

Myonyssus jamesoni Ewing and Baker, 1947
Hosts: *Blarina brevicauda* (1, 2)
Sorex fumeus (2)
S. palustris (3)
Dist.: NB, Ont
Records: 1. Ewing and Baker 1947 (Ont); 2. Jameson 1950 (Ont); 3. Whitaker and French 1982 (NB)

Remarks: Whitaker and French (1982) placed *M. jamesoni* in the family Laelapidae.

Family HALARACHNIDAE

Pneumonyssus spp.
Host: *Spermophilus richardsonii*
Dist.: Alta
Record: Hilton and Mahrt 1971

Zumptiella bakeri (Furman)
Host: *Tamiasciurus hudsonicus*
Dist: Que
Record: Gyorkos and Hilton 1982

Family LAELAPIDAE

Androlaelaps casalis (Berlese, 1887)
Host: *Peromyscus maniculatus*
Dist.: NB
Record: Whitaker and French 1982

Androlaelaps fahrenholzi (Berlese, 1911)
Syn.: *Androlaelaps glasgowi* (Ewing, 1925)
Atricholaelaps glasgowi (Ewing, 1925)
Hosts: *Blarina brevicauda* (2, 6)
Clethrionomys gapperi (4, 6)
Condylura cristata (6)
Microtus chrotorrhinus (6)
M. pennsylvanicus (3, 6)
M. p. pennsylvanicus (1, 2)
M. pinetorum scalopsoides (1)
Napaeozapus insignis (5, 6)
Peromyscus maniculatus (6)
Peromyscus sp. (1)
Rattus norvegicus (1)
Sorex fumeus (6)
Synaptomys borealis (6)

S. cooperi (6)
Zapus hudsonius (5)
Z. h. ontarioensis (1)
Dist.: NB, NS, Ont, PEI, Sask
Records: 1. Judd 1950 (Ont), 2. 1953 (Ont); 3. Wilson 1967 (Sask); 4. Wright 1979 (NS); 5. Jones and Thomas 1982 (NB, NS, PEI); 6. Whitaker and French 1982 (NB)

Androlaelaps spp.
Hosts: *Blarina brevicauda*
Clethrionomys gapperi
Marmota monax
Microtus pennsylvanicus
Napaeozapus insignis
Peromyscus leucopus
P. maniculatus
Zapus hudsonius
Dist.: NS
Record: Wright 1979

Echinolaelaps echidninus (Berlese, 1887)
Host: *Rattus norvegicus*
Dist.: Que
Record: Firlotte 1948

Echinonyssus blarinae
Host: *Blarina brevicauda*
Dist.: NB
Record: Whitaker and French 1982

Echinonyssus isabellinus (Oudemans, 1913)
Hosts: *Blarina brevicauda* (2)
Clethrionomys gapperi (2)
Condylura cristata (2)
Microtus chrotorrhinus (2)
M. pennsylvanicus (2)
Napaeozapus insignis (1)
Synaptomys cooperi (2)
Zapus hudsonius (1)
Dist.: NB, PEI
Records: 1. Jones and Thomas 1982 (PEI); 2. Whitaker and French 1982 (NB)

Echinonyssus talpae (Zemskaya, 1955)
Hosts: *Blarina brevicauda*
Microsorex hoyi
Sorex cinereus
S. fumeus
S. gaspensis
S. palustris
Dist.: NB
Record: Whitaker and French 1982

Echinonyssus spp.
Host: *Clethrionomys gapperi*
Dist.: NB
Record: Whitaker and French 1982

Eulaelaps stabularis (Koch, 1836)
Syn.: *Laelaps pedalis* Banks, 1909
Hosts: *Blarina brevicauda* (3, 6, 7)
Clethrionomys gapperi (6, 7)
Condylura cristata (7)
Microtus chrotorrhinus (7)
M. pennsylvanicus (5, 6)
Peromyscus leucopus (6)
P. maniculatus (7)
Peromyscus spp. (4)
Sorex cinereus (5, 6)
Synaptomys cooperi (7)
Chipmunk (1, 2)
Dist.: NB, NS, Ont, Sask
Records: 1. Banks 1909 (Ont); 2. Jarvis 1910 (Ont); 3. Jameson 1950 (Ont); 4. Judd 1950 (Ont); 5. Wilson 1967 (Sask); 6. Wright 1979 (NS); 7. Whitaker and French 1982 (NB)

Gemasus spp.
Host: Red squirrel
Dist.: Ont
Record: Jarvis 1910

Haemogamasus ambulans (Thorell, 1872)
Syn.: *Haemogamasus alaskensis* Ewing, 1925
Hosts: *Blarina brevicauda* (1, 7)
Clethrionomys gapperi (5, 7)
C. rutilus (3)
Condylura cristata (7)
Dicrostonyx groenlandicus (2)
Eutamias minimus (4)
Microsorex hoyi (7)
Microtus chrotorrhinus (7)
M. pennsylvanicus (7)
Napaeozapus insignis (6)
Sorex fumeus (7)
S. gaspensis (7)
S. palustris (7)
Synaptomys cooperi (7)
Zapus hudsonius (6, 7)
Dist.: NB, NS, NWT, Ont, PEI
Records: 1. Jameson 1950 (Ont); 2. McAlpine 1965 (NWT); 3. Mitchell and Behin 1965 (NWT); 4. Wilson 1967 (Ont); 5. Wright 1979 (NS); 6. Jones and Thomas 1982 (NB, PEI); 7. Whitaker and French 1982 (NB)

Remarks: Mitchell and Behin (1965) have *Haemogamasus alaskensis* and *H. ambulans* listed as seperate species.

Haemogamasus hirsutus Berlese, 1889
Host: *Zapus hudsonius ontarioensis*
Dist.: Ont
Record: Judd 1950

Haemogamasus liponyssoides Ewing, 1925
Syn.: *Euhaemogamasus liponyssoides* (Ewing, 1925)
Hosts: *Blarina brevicauda* (2, 3)
Condylura cristata (3)
Microtus chrotorrhinus (3)
Scapanus orarius schefferi (1)
Sorex cinereus (3)
S. fumeus (3)
S. gaspensis (3)
Synaptomys cooperi (3)

Mole (1)
Dist.: BC, NB, Ont
Records: 1. Spencer 1940 (BC); 2. Jameson 1950 (Ont); 3. Whitaker and French 1982 (NB)

Haemogamasus longitarsus (Banks, 1910)
Syn.: *Euhaemogamasus microti* (Ewing, 1925)
Host: *Blarina brevicauda*
Dist.: Ont
Record: Jameson 1950

Haemogamasus reidi Ewing, 1925
Host: *Clethrionomys gapperi*
Dist.: NB
Record: Whitaker and French 1982

Haemogamasus spp.
Hosts: *Blarina brevicauda*
Clethrionomys gapperi
Condylura cristata
Glaucomys sabrinus
Microtus pennsylvanicus
Napaeozapus insignis
Peromyscus leucopus
Sorex cinereus
S. palustris
Dist.: NS
Record: Wright 1979

Haemolaelaps glasgowi (Ewing, 1925)
Hosts: *Blarina brevicauda* (1)
Clethrionomys gapperi (2)
Marmota monax (3)
Peromyscus maniculatus (2)
Tamiasciurus hudsonicus (2)
Tamias striatus (2)
Dist.: Ont
Records: 1. Jameson 1950; 2. Scholten et al. 1962; 3. Ko 1972b

Hirstionyssus isabellinus (Oudemans, 1913)
Hosts: *Clethrionomys rutilus* (2)
Dicrostonyx groenlandicus (1)
Dist.: NWT
Records: 1. McAlpine 1965; 2. Mitchell and Behin 1965

Hirstionyssus occidentalis (Ewing)
Host: *Spermophilus richardsonii*
Dist.: Alta
Record: Hilton and Mahrt 1971

Hirstionyssus talpae Zemskaya, 1955
Host: *Blarina brevicauda*
Dist.: NS
Record: Wright 1979

Hirstionyssus spp.
Hosts: *Blarina brevicauda* (1, 4)
Clethrionomys gapperi (4)
Condylura cristata (4)
Mephitis mephitis (2, 3)
Microtus pennsylvanicus (3, 4)
Peromyscus maniculatus (3, 4)
Procyon lotor (4)
Sorex palustris (3)
Dist.: NS, Ont
Records: 1. Jameson 1950 (Ont); 2. Judd 1953 (Ont); 3. Scholten et al. 1962 (Ont); 4. Wright 1979 (NS)

Hyperlaelaps spp.
Hosts: *Clethrionomys gapperi*
Microtus pennsylvanicus
Zapus hudsonius
Dist.: NS
Record: Wright 1979

Hypoaspis spp.
Host: *Peromyscus leucopus*
Dist.: NS
Record: Wright 1979

Laelaps alaskensis Grant, 1947
Hosts: *Dicrostonyx groenlandicus* (1)
Microtus chrotorrhinus (3)
M. pennsylvanicus (2, 3)
Synaptomys borealis (3)
S. cooperi (3)
Dist.: NB, NWT, Ont
Records: 1. McAlpine 1965 (NWT); 2. Wilson 1967 (Ont); 3. Whitaker and French 1982 (NB)

Laelaps clethrionomydis Lange, 1955
Host: *Clethrionomys rutilus*
Dist.: NWT
Record: Mitchell and Behin 1965

Laelaps kochi Oudemans, 1936
Syn.: *Laelaps microti* (Ewing, 1933)
Tetragonyssus microti Ewing, 1933
Hosts: *Blarina brevicauda* (1)
Clethrionomys gapperi (5)
Glaucomys sabrinus (5)
Microtus chrotorrhinus (7)
M. pennsylvanicus (5, 7)
M. p. pennsylvanicus (2, 3, 4)
Napaeozapus insignis (6)
Synaptomys cooperi (7)
Dist.: NB, NS, Ont, PEI
Records: 1. Jameson 1950 (Ont); 2. Judd 1950 (Ont), 3. 1953 (Ont), 4. 1954a (Ont); 5. Scholten et al. 1962 (Ont); 6. Jones and Thomas 1982 (NS, PEI); 7. Whitaker and French 1982 (NB)

Laelaps multispinosus Banks, 1909
Syn.: *Ondatralaelaps multispinosa* (Banks, 1910)
Hosts: *Ondatra zibethicus* (1, 2, 4, 5)
O. z. osoyoosensis (3)
Dist.: BC, Man, NS, Ont
Records: 1. Banks 1909 (Ont); 2. Jarvis 1910 (Ont); 3. Knight 1951 (BC); 4. McKenzie and Welch 1979 (Man); 5. Wright 1979 (NS)

Laelaps muris (Ljungh, 1799)
Hosts: *Microtus p. pennsylvanicus* (1, 2, 3)
Ondatra z. zibethicus (1)
Dist.: Ont
Records: 1. Judd 1950, 2. 1953, 3. 1954a

Remarks: Records of *L. muris* by Judd (1950, 1953, 1954a) probably belong to *L. alaskensis* (Wilson 1967).

Laelaps propheticus Banks, 1909
Host: Groundhog
Dist.: Ont
Records: Banks 1909; Jarvis 1910

Laelaps spp.
Hosts: *Clethrionomys gapperi* (3)
Microtus pennsylvanicus (3)
Ondatra zibethicus (1)
Rattus norvegicus (2)
Dist.: BC, NS, Que
Records: 1. Spencer 1940 (BC); 2. Firlotte 1948 (Que); 3. Wright 1979 (NS)

Laelaspis spp.
Host: *Zapus hudsonius*
Dist.: NS
Record: Wright 1979

Ololaelaps spp.
Hosts: *Microtus pennsylvanicus*
Zapus hudsonius
Dist.: NS
Record: Wright 1979

Family MACRONYSSIDAE

Macronyssus crosbyi (Ewing and Stover, 1915)
Hosts: *Clethrionomys gapperi* (1)
Myotis lucifugus (2)
Myotis spp. (1)
Dist.: NS, PEI
Records: 1. Wright 1979 (NS); 2. Jones and Thomas 1983 (PEI)

Ornithonyssus bacoti (Hirst, 1913)
Syn.: *Liponyssus bacoti* Hirst, 1913
Hosts: *Rattus norvegicus* (1, 2, 3)
Rattus rattus (3)
Dist.: BC
Records: 1. Spencer 1937, 2. 1939b, 3. 1940

Steatonyssus occidentalis (Ewing, 1933) Whitaker and Wilson, 1974
Syn.: *Caratonyssus occidentalis* Ewing, 1933
Hosts: *Myotis l. lucifugus* (1)
Bats (2)
Dist.: BC, Ont
Records: 1. Dymond 1938 (Ont); 2. Spencer 1939a (BC)

Family OLOGAMASIDAE

Cyrtolaelaps spp.
Hosts: *Blarina brevicauda*
Clethrionomys gapperi
Condylura cristata
Microsorex hoyi
Microtus chrotorrhinus
Peromyscus maniculatus
Sorex cinereus
S. fumeus
S. gaspensis
S. palustris
Dist.: NB
Record: Whitaker and French 1982

Euryparasitus spp.
Hosts: *Blarina brevicauda*
Condylura cristata
Microtus chrotorrhinus
M. pennsylvanicus
Napaeozapus insignis
Sorex cinereus
S. fumeus
S. gaspensis
Synaptomys borealis
S. cooperi
Dist.: NB
Record: Whitaker and French 1982

Family SPINTURNICIDAE

Spinturnix americanus (Banks, 1902)
Host: *Myotis lucifugus*
Dist.: PEI
Record: Jones and Thomas 1983

Spinturnix globosus (Rudnick, 1960) Domrow, 1972
Syn.: *Paraspinturnix globosus* Rudnick, 1960
Host: *Myotis lucifugus*
Dist.: Alta
Record: Smith 1981

Remarks: The mites were collected in and around the orifice of the bats (Smith 1981).

Spinturnix spp.
Hosts: *Eptesicus fuscus* (4)
Myotis l. lucifugus (1)
Myotis spp. (5)
Bats (2, 3)
Dist.: BC, NS, Ont
Records: 1. Dymond 1938 (Ont); 2. Spencer 1939a (BC), 3. 1940 (BC); 4. Judd 1953 (Ont); 5. Wright 1979 (NS)

SUBORDER IXODIDA

Family ARGASIDAE

Ornithodoros kelleyi Cooley and Kohls, 1941
Host: Bats
Dist.: Alta, Sask
Record: Wilkinson et al. 1981

Remarks: The specimens were collected from bat-inhabited buildings (Wilkinson et al. 1980).

Ornithodoros spp.
Host: *Eumops perotis californicus*
Dist.: BC
Record: Spencer 1939a

Otobius megnini (Duges, 1884) Banks, 1912
Syn.: *Ornithodoros megnini* Duges, 1884
Hosts: *Cervus elaphus* (6)
Odocoileus hemionus (5, 6)
O. virginianus (6)
Oreamnos americanus (3, 5, 6, 7)
Ovis canadensis (5, 6, 7)
O. c. californiana (8)
Jack rabbit (2)
Rabbit (1)
Dist.: Alta, BC, Man
Records: 1. Hadwen 1913 (Alta); 2. Hewitt 1915 (Alta); 3. Cowan 1944 (Alta); 4. MacNay 1952 (BC); 5. Gregson 1953 (BC); 6. Rich 1957 (BC); 7. MacNay 1958 (BC); 8. Blood 1963 (BC)

Remarks: Brown and Kohls (1950) refer to Hadwen's (1913) specimens as *Otobius lagophilus* Cooley and Kohls.

Family IXODIDAE

Dermacentor albipictus (Packard, 1869) Banks, 1907
Hosts: *Alces alces* (1, 2, 3, 6, 7, 9, 10, 12, 13, 14, 16, 21, 22, 23, 25, 26, 27)
Canis latrans (5, 20)
Cervus elaphus (2, 3, 6, 14, 18)
Odocoileus hemionus (3, 5, 6, 24)
O. h. columbianus (8)
O. h. hemionus (4, 6, 20)
O. virginianus (21, 23, 24)
Oreamnos americanus (17)
Ovis canadensis (6)
O. c. californiana (15)
Rangifer tarandus caribou (19)
Coast deer (5)
Deer (7, 11, 12, 14)
Dist.: Alta, BC, Man, NB, NS, Ont, Que, Sask
Records: 1. Jarvis 1910 (Ont); 2. Hewitt 1915 (BC, Man, Que); 3. Cameron and Fulton 1927 (Sask); 4. Buckell 1934 (BC); 5. Hearle 1938 (BC); 6. Cowan 1944 (Alta); 7. Bequaert 1945 (NB, NS, Ont); 8. Cowan 1946 (BC); 9. Brown and Kohls 1950 (Alta); 10. Peterson 1955 (Que); 11. Banfield 1956 (Alta); 12. Gregson 1958 (BC); 13. Ritcey and Edwards 1958 (BC); 14. Stelfox 1962 (Alta); 15. Blood 1963 (BC); 16. Fyvie 1966 (Ont); 17. Kerr and Holmes 1966 (Alta); 18. Flook and Stenton 1969 (Alta, BC); 19. Martell et al. 1969 (NS); 20. Wilkinson 1970 (BC); 21. Addison et al. 1979 (Ont); 22. Samuel and Barker 1979 (Alta); 23. Wright 1979 (NS); 24. Samuel et al. 1980 (Alta); 25. Timmerman and Lankester 1980 (Ont); 26. Drew and Samuel 1985 (Alta), 27. 1986 (Alta)

Remarks: Cameron and Fulton (1927) reported *Alces machlis* and *Cervus canadensis* as hosts to *D. albipictus*. These hosts are recorded here as *Alces alces* and *Cervus elaphus*, respectively. Buckell (1934) presumed the nymphs he collected were *D. albipictus*.

Dermacentor andersoni Stiles, 1908
Syn.: *Dermacentor venustus* Marx in Neumann, 1897
Hosts: *Alces alces* (12, 13, 18)
A. a. andersoni (17)
Antilocapra a. americana (17)
Canis latrans (7)
Cervus elaphus (13)
Erethizon dorsatum nigriscens (17)
E. d. epixanthium (17)
Erethizon sp. (12)
Lepus townsendii campanius (7)
Marmota caligata (17)
M. flaviventris avara (6, 12)
M. monax (17, 18)
Marmota sp. (7)
Mephitis mephitis (17)
Mustela frenata nevadensis (17)
M. putorius (lab animal) (17)
Neotoma c. cinerea (16)
Odocoileus hemionus (1, 5, 6, 9)
O. h. hemionus (12, 14, 17)
Oreamnos americanus (4, 9, 15, 19)
O. a. missoulae (12)
Ovis canadensis (1, 7, 8, 11)
O. c. canadensis (12)
Spermophilus columbianus (5, 11)
S. c. columbianus (12)
S. richardsonii (7)
Spermophilus spp. (3)
Taxidea t. taxus (17)
Ursus arctos (1, 5)
Ursus spp. (7, 12)
Vulpes vulpes (17)
Chipmunks (2, 5, 6, 7, 18)
Deer (7, 12, 13, 18)
Field mice (2)
Groundhogs (4, 18)
Ground squirrels (2, 7)
Guinea pigs (8, 12)
Lab rabbits (12, 17)
Mice (5, 7, 18)
Packrats (5, 12)
Pocket mice (5)
Rabbits (2, 5, 7, 18)
Squirrels (2, 5, 6)
Tree squirrels (7)
Weasels (7)
White mice (12)
Unspecified (10)
Dist.: Alta, BC, Man, Ont
Records: 1. Hewitt 1915 (BC); 2. Bruce 1920 (BC); 3. McLeod 1933 (BC, Man); 4. Buckell 1934 (BC); 5. Hearle 1938 (BC); 6. Holland 1938 (BC), 7. 1939 (Alta); 8. Gregson 1941c exp. (BC); 9. Cowan 1944 (Alta); 10. Brown and Kohls 1950 (Alta); 11. Banfield 1956 (Alta); 12. Gregson 1958 exp. (BC); 13. Stelfox 1962 (Alta); 14. Wilkinson 1965 (BC); 15. Kerr and Holmes 1966 (Alta); 16. Shemanchuk and Kiceniuk 1970 (Alta); 17. Wilkinson 1970 nat./exp. (Alta, BC); 18. Ko 1972b (Ont); 19. Samuel et al. 1978 (Alta)

Remarks: Wilkinson (1970) presumed the subspecies of porcupine from Alberta was *E. d. epixanthium.*

Dermacentor variabilis (Say, 1821) Banks, 1907
Hosts: *Blarina brevicauda pallida* (1)
Clethrionomys gapperi (3, 4, 5)
C. g. pallexens (1)
Condylura cristata nigra (1)
Erethizon dorsatum (1, 4)
Lepus americanus (3, 4)
Microtus pennsylvanicus (3, 4, 5)
M. p. acadicus (1)
Napaeozapus insignis (3, 4)
Ondatra zibethicus (4)
O. z. zibethicus (1)
Peromyscus leucopus (1, 3, 4)
P. maniculatus (4, 5)
P. m. abietorum (1)
Peromyscus spp. (1)
Procyon lotor (1, 4)
Spermophilus franklinii (5)
S. tridecemlineatus (5)
Synaptomys cooperi (1, 4)
Tamiasciurus hudsonicus (3)
Tamias striatus (3, 4, 5)
Ursus americanus (4)
U. a. americanus (1)
Zapus hudsonius (3, 4, 5)
Z. h. acadicus (1)
Unspecified (2)
Dist.: Man, NS
Records: 1. Dodds et al. 1969 (NS); 2. Martel et al. 1969 (NS); 3. Garvie et al. 1978 (NS); 4. Wright 1979 (NS); 5. Burachynsky and Galloway 1985 (Man)

Haemaphysalis cinnabarina Koch, 1844
Hosts: Rabbits (1, 2)
Squirrels (2)
Dist.: BC
Records: 1. Hewitt 1915; 2. Hearle 1938
Remarks: Brown and Kohls (1950) refer Hearle's (1938) specimens to *Haemaphysalis chordeilus* (Packard).

Haemaphysalis leporis-palustris (Packard, 1869) Neumann, 1897
Hosts: *Clethrionomys gapperi pallescens* (10)
Lepus americanus (1, 2, 5, 7, 8, 9, 11, 12, 13)
L. a. struthopus (10)
L. a. virginianus (4)
L. capensis hybridus (6)
L. townsendii (5)
Microtus pennsylvanicus (12)
M. p. acadicus (10)
Odocoileus hemionus (7)
Spermophilus richardsonii (5)
Tamiasciurus hudsonicus (12)
T. h. gymnicus (10)
Tamias striatus (13)
Chipmunks (3)
Groundhogs (3)
Hare (3)
Rabbits (2, 3, 4)
Squirrels (2)
Dist.: Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask
Records: 1. Hewitt 1915 (Man); 2. Cameron and Fulton 1927 (Sask); 3. Hearle 1938 (BC); 4. Bequaert 1945 (NB,NS,Ont,Que); 5. Brown and Kohls 1950 (Alta); 6. Judd 1953 (Ont); 7. Scholten et al. 1962 (Ont); 8. Wilson 1967 (NB); 9. Dodds et al. 1969 (NS); 10. Martell et al. 1969 (NS); 11. Ko 1972b nat./exp. (Ont); 12. Wright 1979 (NS); 13. Jones and Thomas 1980 (PEI)

Ixodes angustus Neumann, 1899
Hosts: *Blarina brevicauda* (5, 9, 10)
B. b. pallida (7)
Clethrionomys gapperi (9, 10)
C. g. pallescens (7)
Clethrionomys spp. (3)
Condylura cristata (10)
Microsorex hoyi (10)
Microtus chrotorrhinus (10)
M. pennsylvanicus (9)
M. p. acadicus (7)
Napaeozapus insignis (9)
Ochotona spp. (1)
Peromyscus leucopus (9)
P. maniculatus (10)
Peromyscus spp. (4)
Sorex cinereus (10)
S. c. acadicus (7)
S. fumeus (9, 10)
S. gaspensis (10)
S. palustris (10)
Sorex spp. (1)
Synaptomys borealis (10)
S. cooperi (10)
Tamiasciurus douglasii mollipilosus (2)
T. hudsonicus (8)
Tamias striatus (6)
Zapus hudsonius (10)
Chipmunk (1)
Mice (1)
Rabbit (1)
Squirrel (1)
Vole (1)
Dist.: Alta, BC, NB, NS, Ont
Records: 1. Hearle 1938 (BC); 2. Gregson 1941b (BC); 3. Brown and Kohls 1950 (Alta); 4. Judd 1950 (Ont), 5. 1953 (Ont); 6. Wilson 1967 (Ont); 7. Martell et al. 1969 (NS); 8. Mahrt and Chai 1972 (Alta); 9. Wright 1979 (NS); 10. Whitaker and French 1982 (NB)

Ixodes californicus Banks, 1904
Hosts: *Odocoileus hemionus columbianus* (2)
Peromyscus spp. (1)
Squirrel (1)
Dist.: BC
Records: 1. Gregson 1942 exp.; 2. Cowan 1946

Remarks: Gregson's (1942) specimens were misidentified and should be *I. pacificus* (Arthur and Snow 1968).

Ixodes cookei Packard, 1869
Syn.: *Ixodes hexagonus* var. *cookei* Nuttall and Warburton, 1911
Hosts: *Castor canadensis* (6)
Erethizon dorsatum (12)
E. d. dorsatum (8)
Marmota monax (6, 7, 9, 10, 11)
M. m. rufescens (4, 5)
Mephitis mephitis (5, 6, 7)
Mustela erminea (12)
M. vison (4, 13)
M. v. vison (8)
Procyon lotor (12)
Deer (3)
Groundhog (1, 2)
Packrat (2)
Squirrel (3)
Mouse (3)
Dist.: BC, NS, Ont, Que
Records: 1. Jarvis 1910 (Ont); 2. Hearle 1938 (BC); 3. Gregson 1942 (BC); 4. Bequaert 1945 (NS, Ont, Que); 5. Judd 1950 (Ont), 6. 1954a (Ont); 7. Scholten et al. 1962 (Ont); 8. Martell et al. 1969 (NS); 9. Ko 1972a (Ont), 10. 1972b (Ont), 11. 1973 (Ont); 12. Wright 1979 (NS); 13. Jones and Thomas 1980 (Que)

Ixodes hearlei Gregson, 1941
Host: *Tamiasciurus hudsonicus streatori*
Dist.: BC
Record: Gregson 1941b

Ixodes hexagonus Leach, 1815
Host: Weasel
Dist.: BC
Record: Hearle 1938

Ixodes kingi Bishopp, 1911
Hosts: *Mephitis mephitis* (2)
Mustela erminea (2)
M. frenata nevadensis (2)
Spermophilus richardsonii (1)
Taxidea taxus (1)
Dist.: Alta, BC, Sask
Records: 1. Brown and Kohls 1950 (Alta); 2. Wilkinson 1970 (BC, Sask)

Ixodes marmotae Cooley and Kohls, 1938
Host: *Mephitis mephitis*
Dist.: BC
Record: Wilkinson 1970

Ixodes marxi Banks, 1908
Hosts: *Glaucomys sabrinus* (6)
G. s. gouldi (5)
Sorex cinereus (7)
Tamiasciurus hudsonicus (4, 6, 8)
T. h. loquax (3)
Chipmunk (2)
Squirrel (1, 2)
Weasel (2)
Dist.: BC, NS, Ont, PEI, Que
Records: 1. Jarvis 1910 (Ont); 2. Hearle 1938 (BC); 3. Bequaert 1945 (Ont); 4. Scholten et al. 1962 (Ont); 5. Martell et al. 1969 (NS); 6. Wright 1979 (NS); 7. Jones and Thomas 1980 (PEI); 8. Gyorkos and Hilton 1982 (Que)

Ixodes muris Bishopp and Smith, 1937
Hosts: *Blarina brevicauda* (4)
Clethrionomys gapperi (4)
Microtus pennsylvanicus (3, 4)
M. p. acadicus (2)
M. p. enixus (1)
Napaeozapus insignis (3)
N. i. insignis (1)
Peromyscus leucopus caudatus (2)
P. maniculatus (4)
Sorex arcticus (4)
S. cinereus (3, 4)
S. c. acadicus (2)
Synaptomys cooperi (3)
S. c. cooperi (2)
Tamiasciurus hudsonicus (3)
Tamias striatus (3)
Zapus hudsonius (3, 4, 5)
Z. h. acadicus (2)
Dist.: NB, Nfld, NS, PEI
Records: 1. Bequaert 1945 (Nfld, NS); 2. Martell et al. 1969 (NS); 3. Wright 1979 (NS); 4. Jones and Thomas 1980 (NB, NS, PEI), 5. 1982 (NB, NS, PEI)

Ixodes ochotonae Gregson, 1941
Hosts: *Neotoma cinerea*
Ochotona princeps
O. p. brooksi
O. p. brunnescens
Peromyscus spp.
Dist.: BC
Record: Gregson 1941b

Ixodes pacificus Cooley and Kohls, 1943
Hosts: *Eutamias* spp. (2)
Glaucomys sabrinus oregonensis (1)
Mustela vison (2)
Odocoileus hemionus (2)
O. h. columbianus (2)
Peromyscus spp. (2)
Scapanus latimanus (2)
Tamiasciurus spp. (2)
Coast deer (2)
Mouse (2)
Dist.: BC
Records: 1. Spencer 1956; 2. Arthur and Snow 1968

Ixodes ricinus (Linnaeus, 1758)
Host: Coast deer
Dist.: BC
Record: Hearle 1938
Remarks: According to Arthur and Snow (1968), Hearle's (1938) specimens of *I. ricinus* are misidentified, and are correctly *I. pacificus*.

Ixodes rugosus Cooley and Kohls, 1945
Host: *Canis latrans*
Dist.: BC
Record: Wilkinson 1970

Ixodes scapularis Say, 1821
Host: *Odocoileus virginianus*
Dist.: Ont
Record: Watson and Anderson 1976

Ixodes sculptus Neumann, 1904
Hosts: *Canis latrans* (3)
Mustela frenata (1)
Spermophilus columbianus (1)
S. franklinii (4)
S. richardsonii (1, 4)
Ground squirrel (2)
Dist.: Alta, BC, Sask
Records: 1. Brown and Kohls 1950 (Alta); 2. MacNay 1952 (Sask); 3. Wilkinson 1970 (BC); 4. Hilton and Mahrt 1971 (Alta)

Ixodes soricis Gregson, 1942
Hosts: *Sorex vagrans*
S. v. vagrans
Sorex spp.
Dist.: BC
Record: Gregson and Kohls 1952

Ixodes spinipalpus Hadwen and Nuttall, 1916
Syn.: *Ixodes dentatus spinipalpis* Hadwen and Nuttall, 1916
Hosts: *Lepus americanus* (1)
Neotoma c. cinerea (4)
Ochotona sp. (2)
Sorex cinereus (3)
Tamiasciurus douglasii (1)
Rabbit (2)
Squirrel (2)
Dist.: Alta, BC
Records: 1. Nuttall 1916 (BC); 2. Hearle 1938 (BC); 3. Brown and Kohls 1950 (Alta); 4. Shemanchuk and Kiceniuk 1970 (Alta)

Remarks: Brown and Kohls (1950) believed the shrew was *S. cinereus,* but they were not certain.

Ixodes texanus Banks, 1909
Hosts: *Marmota monax (6)*
Mephitis mephitis (5)
Mustela vison (4)
Procyon lotor (1, 5)
Vulpes vulpes (5)
Mustelidae gen. sp. (3)
Mink (2)
Squirrel (1)
Weasel (1, 2)
Dist.: BC, Ont
Records: 1. Hearle 1938 (BC); 2. Gregson 1941b (BC), 3. 1941c exp. (BC); 4. Bequaert 1945 (Ont); 5. Webster 1966 (Ont); 6. Ko 1972b (Ont)

Ixodes spp.
Hosts: *Clethrionomys gapperi* (1)
Erethizon dorsatum (2)
Peromyscus maniculatus (1)
Dist.: BC, Ont
Records: 1. Scholten et al. 1962 (Ont); 2. Wilkinson 1970 (BC)

Unidentified Ixodidae

Ixodidae gen. sp.
Hosts: Rodents
Dist.: Alta, BC
Record: Gibbons 1939

Unidentified Chelicerata

Acari gen. spp.
Host: *Glaucomys sabrinus oregonensis*
Dist.: BC
Record: Spencer 1956

PHYLUM UNIRAMIA

CLASS INSECTA

ORDER COLEOPTERA

Family LEPTINIDAE

Leptinillus aplodontiae (Ferris, 1918)
Syn.: *Leptinus aplodontiae* Ferris, 1918
Hosts: *Aplodontia pacifica* (2)
Aplodontia spp. (1)
Dist.: BC
Records: 1. Hopping 1949; 2. Spencer 1957

Leptinillus validus (Horn, 1872)
Syn.: *Leptinus validus* Horn, 1872
Hosts: *Castor canadensis* (1, 3, 4, 5)
Beaver (2)
Dist.: BC, Hudson's Bay Area, Ont, Que
Records: 1. Horn 1872 (Hudson's Bay Area); 2. Hopping 1949 (BC); 3. Judd 1954a (Ont); 4. Parks and Barnes 1955 (BC, Ont, Que); 5. Spencer 1957 (BC)

Remarks: Horn (1872) did not specify the host, we assumed it was *Castor canadensis.*

Leptinus americanus LeConte, 1866
Hosts: *Blarina brevicauda* (2)
Microtus oregoni serpens (3)
Sorex spp. (1, 3)
Dist.: BC, Ont
Records: 1. Hopping 1949 (BC); 2. Jameson 1950 (Ont); 3. Spencer 1957 (BC)

Remarks: Spencer (1957) notes that Hopping (1949) recorded his material from *Sorex* sp. as *Leptinus testaceus* Muller, 1817. It is in fact *L. americanus.* Gregson (1940), cited in Hopping (1949), also reported *L. testaceus* from *Sorex* sp. from BC.

Platypsyllus castoris Ritsema, 1869
Hosts: *Castor canadensis* (3, 4)
Beaver (1, 2)
Dist.: BC, Ont
Records: 1. Anon 1930 (Ont); 2. Hopping 1949 (BC); 3. Spencer 1957 (BC); 4. Scholten et al. 1962 (Ont)

ORDER DIPTERA

Family CALLIPHORIDAE

Phormia regina (Meigen, 1826)
Host: *Odocoileus hemionus columbianus*
Dist.: BC
Record: Cowan 1946

Family CUTEREBRIDAE

Cuterebra americana var. *polita* Coquillett, 1898
Host: unspecified
Dist.: BC
Record: Cameron 1926

Cuterebra angustifrons Dalmat, 1942
Hosts: *Peromyscus leucopus* (2)
P. l. noveboracensis (1)
Dist.: Ont
Records: 1. Sillman 1957; 2. Sillman and Smith 1959

Cuterebra emasculator Fitch, 1856
Hosts: *Tamias striatus* (2, 3, 4, 5)
T. s. lysteri (1)
Dist.: Ont
Records: 1. Cameron 1926 (unspecified); 2. Bennett 1955; 3. Scholten et al. 1962; 4. Bennett 1972, 5. 1973

Cuterebra fasciata Swenk, 1905
Host: unspecified
Dist.: BC, NB
Record: Cameron 1926

Remarks: The larvae were found in subcutaneous tissues.

Cuterebra fontinella Clark, 1827
Host: *Mus musculus*
Dist.: Ont
Record: Judd 1954b

Remarks: The larva emerged from the skin leaving a hole that penetrated the underlying muscle of the abdominal wall and led into the body cavity (Judd 1954b).

Cuterebra grisea Coquillett, 1904
Hosts: *Peromyscus leucopus noveboracensis* (3)
P. maniculatus (4)
P. m. austerus (5)
Spermophilus richardsonii (1)
S. tridecemlineatus (1)
Field mouse
House mouse (1)
Mice (2)
Dist.: Alta, BC, Man, NWT, Ont, Sask
Records: 1. Cameron 1926 (Alta, BC, Man, NWT, Sask); 2. Strickland 1938 (Alta); 3. Sillman 1957 (Ont); 4. Hunter et al. 1972 (BC); 5. Hunter and Webster 1974 (BC)

Remarks: The larvae were found in subcutaneous tissues. Cameron's (1926) host and distribution records are not well defined.

Cuterebra similis Johnson, 1903
Host: unspecified
Dist.: BC
Record: Cameron 1926

Cuterebra tenebrosa Coquillet, 1898
Host: unspecified
Dist.: BC
Record: Cameron 1926

Cuterebra spp.
Hosts: *Microtus oregoni* (6)
M. townsendii (7)
Mus musculus (3)
Peromyscus leucopus noveboracensis (2, 3, 4)
P. maniculatus (5)
P. m. gracilis (3)
P. m. maniculatus (3)
Rattus norvegicus (1)
Rattus spp. (1)
Sylvilagus floridanus mearnsii (2)
Tamias striatus (3)
Gopher (1)
House mouse (1)
Rabbit (3)
Vole (1)
Dist.: BC, Man, Ont, Sask
Records: 1. Cameron 1926 (Man, Sask, unspecified); 2. Jameson 1943 (Ont); 3. Sillman 1956 (Ont); 4. Sealander 1961 (Ont); 5. Scholten et al. 1962 (Ont); 6. Hunter et al. 1972 (BC); 7. Boonstra 1977 (BC)

Family HIPPOBOSCIDAE

Lipoptena depressa (Say, 1823) Sacken, 1878
Hosts: *Odocoileus hemionus* (2, 9)
O. h. columbianus (3, 4, 5, 6, 7, 8)
O. virginianus (9)
Odocoileus spp. (1)
Dist.: BC
Records: 1. Ferris and Cole 1922; 2. Bequaert 1935, 3. 1937; 4. Spencer 1938a, 5. 1938b; 6. Bequaert 1942; 7. Cowan 1943, 8. 1946; 9. Bequaert 1957

Remarks: Bequaert (1937) recorded the host as the Columbian white-tailed deer by error (Bequaert 1942).

Melophagus ovinus montanus Ferris and Cole, 1922
Hosts: *Canis latrans* (2)
Ovis canadensis (1)
Dist.: Alaska-Yukon boundary, BC

Records: 1. Ferris and Cole 1922 (Alaska-Yukon boundary); 2. Bequaert 1942 (BC)

Remarks: Bequaert (1942) did not recognize *M. o. montanus* as a distinct subspecies.

Neolipoptena ferrisi (Bequaert, 1935) Bequaert, 1942
Syn.: *Lipoptena ferrisi* Bequaert, 1935
Hosts: *Odocoileus hemionus* (1, 7)
O. h. columbianus (3, 4, 6)
O. h. hemionus (3, 4, 5)
O. virginianus (1)
Dist.: BC
Records: 1. Bequaert 1935, 2. 1937; 3. Spencer 1938a, 4. 1938b; 5. Bequaert 1942; 6. Cowan 1946; 7. Bequaert 1957

Family NYCTERIBIIDAE

Basilia forcipata Ferris, 1924
Hosts: *Myotis lucifugus* (2)
Bat (1)
Dist.: BC
Record: Spencer 1938b, 2. 1939a

Basilia spp.
Host: *Eumops perotis californica*
Dist.: BC
Record: Spencer 1939a

Family OESTRIDAE

Cephenemyia apicata Bennett and Sabrosky, 1962
Host: *Odocoileus hemionus*
Dist.: Alta, BC
Record: Bennett and Sabrosky 1962

Cephenemyia jellisoni Townsend, 1941
Hosts: *Alces alces* (4)
Cervus elaphus (5)
Odocoileus hemionus (2, 4)
O. h. columbianus (1, 3)
O. h. hemionus (1)
Dist.: Alta, BC, Ont
Records: 1. Cowan 1943 (BC), 2. 1944 (Alta), 3. 1946 (BC); 4. Bennett and Sabrosky 1962 (BC, Ont); 5. Flook and Stenton 1969 (Alta)

Cephenemyia phobifer (Clark, 1815) Aldrich, 1915
Hosts: *Alces alces* (3)
Odocoileus virginianus (2)
Rangifer tarandus caribou (1)
Dist.: Ont, Sask
Records: 1. Erickson and Highby 1942 (Sask); 2. Bennett 1962 (Ont); 3. Bennett and Sabrosky 1962 (Ont)

Remarks: The larvae were found in the nasal passages and retropharyngeal pouches.

Cephenemyia trompe (Modeer, 1786)
Syn.: *Cephenemyia nasalis* Seguy, 1927
Hosts: *Odocoileus virginianus* (5)
Rangifer tarandus (3, 4, 5)
R. t. caribou (2)
Dist.: Alta, BC, Man, Nfld, NWT, Ont, Sask
Records: 1. Buckell 1934 (BC); 2. Cowan 1944 (Alta, BC); 3. Banfield 1954 (Man, NWT); 4. Gibbs 1960 (unspecified); 5. Bennett and Sabrosky 1962 (Nfld, NWT, Ont, Sask)

Remarks: The larvae were found in the throat and gullet (Buckell 1934).

Cephenemyia spp.
Hosts: *Alces alces* (1, 2)
Odocoileus virginianus (3)
Dist.: BC, Ont
Records: 1. Peterson 1955 (Ont); 2. Ritcey and Edwards 1958 (BC); 2. Scholten et al. 1962 (Ont)

Remarks: Ritcey and Edwards (1958) felt their specimens were probably *C. jellisoni.*

Oedemagena tarandi Linnaeus, 1758
Hosts: *Rangifer tarandus* (2, 3, 4)
R. t. groenlandicus (5)
R. t. caribou (1)
Dist.: Alta, BC, Man, NWT, YT
Records: 1. Cowan 1944 (Alta, BC); 2. Banfield 1954 (Man, NWT); 3. Choquette et al. 1957 (NWT); 4. Gibbs 1960 (unspecified); 5. Kelsall 1972 (Alta, BC, NWT, YT)

Family SARCOPHAGIDAE

Wohlfahrtia vigil (Walder, 1849)
Syn.: *Wohlfahrtia meigenii* Schiner, 1862
Hosts: *Microtus townsendii* (3)
Lab rat (1, 2)
Dist.: Alta, BC
Records: 1. Morrison 1937 (Alta); 2. Strickland 1938 (Alta); 3. Boonstra 1977 (BC)

Remarks: The larvae were recovered from subcutaneous tissues (Morrison 1937).

Family STREBLIDAE

Trichobius spp.
Host: Bat
Dist.: BC
Record: Spencer 1938b

ORDER HEMIPTERA

Family CIMICIDAE

Cimex pilosellus (Horvath)
Hosts: *Eptesicus fuscus* (3)
E. f. fuscus (1)
E. f. pallidus (1)
Lasionycteris noctivagans (1, 3, 4)
Myotis lucifugus (3)
Myotis l. lucifugus (2)
Dist.: BC, Ont
Records: 1. Spencer 1934 (BC); 2. Dymond 1938 (Ont); 3. Spencer 1939a (BC); 4. Judd 1950 (Ont)

ORDER MALLOPHAGA

Family TRICHODECTIDAE

Damalinia concavifrons Hopkins, 1960
Hosts: *Cervus elaphus* (2)
C. e. nelsoni (1)
Dist.: Alta, BC
Records: 1. Hopkins 1960 (Alta); 2. Flook and Stenton 1969 (Alta, BC)

Damalinia longicornis (Nitzsch, 1818)
Hosts: *Cervus elaphus* (2)
C. e. nelsoni (1)
Dist.: Alta
Record: 1. Hopkins 1960; 2. Flook and Stenton 1969

Damalinia oreamnidis Hopkins, 1960
Host: *Oreamnos americanus missoulae*
Dist.: Alta
Record: Hopkins 1960

Damalinia ovis (Schrank, 1781)
Host: *Ovis canadensis californianus*
Dist.: BC
Record: Hopkins 1960

Damalinia sedecimdecembrii (Eichler, 1946)
Host: *Bison bison*
Dist.: NWT
Record: Hopkins 1960

Eutrichophilus setosus (Giebel, 1874)
Hosts: *Erethizon dorsatum* (1, 2, 4)
E. d. nigrescens (3)
Dist.: Alta, BC, NS, Ont
Records: 1. Thompson 1934 (NS); 2. Judd 1954a (Ont); 3. Hopkins 1960 (Alta, BC); 4. Wright 1979 (NS)

Felicola spenceri Hopkins, 1960
Host: *Lynx canadensis canadensis*
Dist.: BC
Record: Hopkins 1960

Geomydoecus spp.
Host: *Thomomys talpoides*
Dist.: Sask
Record: Hopkins 1960
Remarks: This species may be *G. thomomyus* (Hopkins, 1960).

Neotrichodectes mephitidis (Packard, 1872)
Host: *Mephitis mephitis*
Dist.: Ont
Records: Judd 1953; Scholten et al. 1962

Stachiella kingi (McGregor, 1917)
Syn.: *Trichodectes kingi* McGregor, 1917
Hosts: *Mustela erminea* (2)
M. nivalis rixosa (1)
Dist.: BC, Ont
Record: 1. Hopkins 1960 (BC); 2. Scholten et al. 1962 (Ont)

Trichodectes canis (de Geer, 1778)
Hosts: *Canis latrans incolatus* (3)
C. l. lestes (3)
C. lupus (1, 2)
C. l. columbianus (3)
Dist.: BC, Ont
Records: 1. Thompson 1934 (Ont); 2. Judd 1954a (Ont); 3. Hopkins 1960 (BC)
Remarks: Thompson (1934) had some doubts as to the correctness of the parasite genus, *Trichodectes.*

Trichodectes ermineae (Hopkins, 1941)
Hosts: *Mustela erminea anguinae*
M. e. richardsonii
M. vison energumenos
Dist.: BC
Record: Hopkins 1960

Trichodectes minutus Paine, 1912
Host: *Mustela frenata oribasus*
Dist.: BC
Record: Hopkins 1960

Trichodectes octomaculatus Paine, 1912
Host: *Procyon lotor vancouverensis*
Dist.: BC
Record: Hopkins 1960

Trichodectes osborni (Keler, 1944)
Host: *Spilogale putorius gracilis*
Dist.: BC
Record: Hopkins 1960

Trichodectes parallelus (Osborn, 1896)
Host: *Odocoileus hemionus*
Dist.: Alta
Record: Cowan 1944

Trichodectes pinguis euarctidos Hopkins, 1954
Hosts: *Ursus americanus* (1, 3)
U. a. cinnamomum (2)
Dist.: BC, Ont
Records: 1. Hopkins 1954 (BC, Ont), 2. 1960 (BC); 3. Addison et al. 1978 (Ont)

Trichodectes tibialis (Piaget, 1880)
Host: *Odocoileus h. hemionus*
Dist.: BC
Record: Buckell 1934

Tricholipeurus lipeuroides (Megnin, 1884)
Syn.: *Damalinia lipeuroides* (Megnin, 1884) Holland 1960
Tricholipeurus virginianus Peters, 1930
Hosts: *Canis latrans incolatus* (3)
O. hemionus (7)
O. h. columbianus (1, 2, 3)
O. h. hemionus (1, 3)
O. virginianus (4, 6, 7)
O. v. borealis (5)
Dist.: Alta, BC, Ont, Que

Records: 1. Spencer 1938a (BC); 2. Cowan 1946 (BC); 3. Hopkins 1960 (Alta, BC); 4. Scholten et al. 1962 (Ont); 5. Webster and Stewart 1964 (Que); 6. Watson and Anderson 1975 (Ont); 7. Samuel et al. 1980 (Alta)

Tricholipeurus parallelus (Osborn, 1896)
Hosts: *O. hemionus* (2, 7)
O. h. columbianus (1, 3, 4)
O. h. hemionus (1, 4)
O. virginianus (5, 6, 7)
Odocoileus spp. (5)
Dist.: Alta, BC, NS, Ont
Records: 1. Spencer 1938a (BC); 2. Cowan 1944 (Alta, BC), 3. 1946 (BC); 4. Hopkins 1960 (BC); 5. Walker and Beckland 1970 (NS, Ont); 6. Watson and Anderson 1975 (Ont); 7. Samuel et al. 1980 (Alta)

Tricholipeurus spp.
Host: *Odocoileus hemionus columbianus*
Dist.: BC
Record: Hopkins 1960

Unidentified Mallophaga

Mallophaga gen. spp.
Hosts: *Cervus elaphus*
Oreamnos americanus
Dist.: Alta, BC
Record: Cowan 1944

ORDER SIPHONAPTERA

Family CERATOPHYLLIDAE

Amalaraeus athabascae (Holland, 1952)
Syn.: *Malaraeus penicilliger athabascae* Holland, 1952
Hosts: *Clethrionomys gapperi* (1, 4)
C. g. athabascae (1, 4)
C. g. proteus (1, 3, 4)
C. g. ungava (1, 2, 3, 4)
Clethrionomys spp. (4)
Microtus pennsylvanicus (1, 4)
M. p. drummondii (4)
Microtus spp. (1, 4)
Mustela erminea (4)
Peromyscus maniculatus (4)
Synaptomys borealis (1, 4)
Dist.: Alta, BC, Man, Nfld, NWT, Que, Sask
Records: 1. Holland 1952b (Alta, Man, Nfld, NWT, Que); 2. Gabbutt 1961 (Nfld); 3. Harper 1961 (Nfld, Que); 4. Holland 1984 (BC, Man, Nfld, NWT, Que, Sask)

Amalaraeus dissimilis (Jordan, 1929)
Syn.: *Ceratophyllus penicilliger* Jordan, 1929
Malaraeus penicilliger dissimilis Jordan, 1938
Hosts: *Alopex lagopus* (7)
Clethrionomys gapperi (3, 7)
C. g. athabascae (3, 5, 7)
C. g. saturatus (3)
C. rutilus (6, 7)
C. r. dawsoni (4, 7)
Clethrionomys spp. (7)
Eutamias minimus (7)
Lemmus sibiricus (7)
Lepus americanus dalli (7)
Microtus longicaudus (7)
M. l. vellerosus (7)
M. miurus (7)
M. oeconomus (7)
M. operarius (7)
M. pennsylvanicus (7)
M. p. drummondii (7)
M. xanthognathus (7)
Microtus spp. (7)
Mustela erminea (7)
M. e. arctica (7)
Neotoma cinerea occidentalis (7)
Ochotona collaris (7)
Ondatra spp. (7)
Peromyscus maniculatus (7)
P. m. borealis (1)
Peromyscus spp. (7)
Phenacomys intermedius (3, 7)
Phenacomys spp. (7)
Spermophilus lateralis (7)
Synaptomys borealis (7)
Vulpes vulpes (2)
Vulpes spp. (2)
Mice (3, 7)
Dist.: Alta, BC, NWT, YT
Records: 1. Jordan 1932 (BC); 2. Holland 1944 (NWT), 3. 1949 (Alta, BC, NWT), 4. 1952b (BC, YT); 5. Harper 1956 (NWT); 6. Mitchell and Behin 1965 (NWT); 7. Holland 1984 (Alta, BC, NWT, YT)

Amphalius runatus necopinus (Jordan, 1925) Jordan, 1933
Syn.: *Amphalius necopinus* (Jordan, 1925)
Hosts: *Ochotona princeps* (1, 2, 3)
Ochotona spp. (4)
Dist.: Alta, BC
Records: 1. Holland 1941a (Alta, BC); 2. Brown 1944 (Alta); 3. Holland 1949 (Alta), 4. 1984 (Alta)

Ceratophyllus adustus Jordan, 1932
Host: *Erethizon dorsatum*
Dist.: BC
Records: Jordan 1932

Ceratophyllus diffinis Jordan, 1925
Host: *Eutamias* spp.
Dist.: BC
Record: Holland 1984

Ceratophyllus gallinae (Schrank, 1803)
Hosts: *Clethrionomys gapperi* (1)
Glaucomys volans (2)
Red squirrel (2)
Dist.: Man
Records: 1. Holland 1949, 2. 1984

Ceratophyllus garei Rothschild, 1902
Hosts: *Canis latrans*
Clethrionomys rutilus dawsoni
Clethrionomys spp.
Dicrostonyx hudsonius
Mustela nivalis rixosa
Peromyscus spp.
Sorex vagrans obscurus
Tamiasciurus hudsonicus preblei
Lemming
Dist.: Alta, BC, Man, NWT, Que, YT
Record: Holland 1984

Ceratophyllus lunatus tundrensis Holland, 1944
Hosts: *Clethrionomys rutilus dawsoni* (2)
Dicrostonyx groenlandicus richardsoni (2)
D. hudsonius (2)
Dicrostonyx spp. (3)
Martes americana (1)
Microtus spp. (3)
Mustela erminea (2, 3)
M. e. arctica (1)
M. e. cicognanii (3)
Mustela spp. (2, 3)
Spermophilus parryii (2, 3)
S. p. parryii (2)
Tamiasciurus hudsonicus (3)
Red-backed mouse (3)
Weasel (3)
Dist.: Man, Nfld, NWT, Que, YT
Records: 1. Holland 1944 (NWT), 2. 1951 (NWT, Que), 3. 1984 (Man, Nfld, NWT, Que, YT)

Ceratophyllus niger Fox, 1908
Host: *Tamiasciurus hudsonicus*
Dist.: BC
Record: 1. Holland 1949

Ceratophyllus petrochelidoni Wagner, 1936
Host: *Tamiasciurus hudsonicus picatus*
Dist.: BC
Record: Holland 1984

Dactylopsylla comis Jordan, 1929
Host: *Thomomys talpoides*
Dist.: BC
Record: Jordan 1929

Dactylopsylla rara Fox, 1940
Hosts: *Mustela erminea*
Thomomys talpoides
Dist.: Alta, Sask
Record: Holland 1984

Dasypsyllus gallinulae perpinnatus (Baker, 1904)
Hosts: *Microtus oregoni serpens* (2)
Peromyscus spp. (2)
Tamiasciurus douglasii mollipilosus (1)
Dist.: BC
Records: 1. Wagner 1936; 2. Holland 1984

Foxella ignota albertensis (Jordan and Rothschild, 1915)
Syn.: *Ceratophyllus ignotus albertensis* Jordan and Rothschild, 1915
Dactylopsylla ignota albertensis (Jordan and Rothschild, 1915)
Hosts: *Geomys* spp. (1, 3)
Lynx canadensis (1, 3)
Microtus pennsylvanicus drummondii (5)
Mustela erminea (6)
M. e. arctica (6)
M. frenata (6)
Mustela spp. (1, 3)
Peromyscus maniculatus bairdii (5)
Thomomys talpoides (4, 6)
T. t. fuscus (2)
Thomomys spp. (6)
Pocket gopher (6)
Weasel (4)
Dist.: Alta, Man, Sask
Records: 1. Jordan and Rothschild 1915 (Alta); 2. Holland 1941a (Alta); 3. Brown 1944 (Alta); 4. Holland 1949 (Alta); 5. Buckner and Blasko 1969 (Man); 6. Holland 1984 (Alta, Sask)

Foxella ignota ignota (Baker, 1895)
Hosts: Pocket gopher
Weasel
Dist.: Man
Record: Holland 1984

Foxella ignota recula (Jordan and Rothschild, 1915)
Syn.: *Ceratophyllus ignotus recula* Jordan and Rothschild, 1915
Dactylopsylla ignota recula (Jordan and Rothschild, 1915)
Hosts: *Mustela erminea* (3)
M. frenata (1, 2, 3)
M. f. arizonensis (2, 4)
Mustela spp. (1, 4)
Spermophilus c. columbianus (3)
Thomomys talpoides (1, 3, 4)
T. t. incensus (2, 4)
Thomomys spp. (4)
Gopher (4)
Pocket gopher (4)
Dist.: BC
Records: 1. Jordan and Rothschild 1915; 2. Wagner 1936; 3. Holland 1949, 4. 1984

Malaraeus bitterrootensis (Dunn and Parker, 1923)
Hosts: *Mus* spp. (2, 3)
Mustela erminea invicta (3)
Neotoma cinerea (1)
Neotoma spp. (3)
Dist.: Alta, BC
Records: 1. Wagner 1936a (BC); 2. Brown 1944 (Alta); 3. Holland 1984 (Alta)

Malaraeus euphorbi (Rothschild, 1905)
Syn.: *Ceratophyllus euphorbi* Rothschild, 1905
Hosts: *Clethrionomys* spp. (4)
Mustela frenata longicauda (3)
Peromyscus maniculatus (1, 2, 3, 4)
P. m. artemisiae (3)
P. m. nebrascensis (3)
Peromyscus spp. (4)
Tamiasciurus hudsonicus baileyi (4)
Deer mouse (4)
Dist.: Alta, BC, NWT, Sask
Records: 1. Rothschild 1905 (BC); 2. Wagner 1936a (BC); 3. Holland 1949 (Alta, BC, Sask), 4. 1984 (Alta, BC, NWT, Sask)

Malaraeus telchinus (Rothschild, 1905)
Syn.: *Ceratophyllus telchinum* Rothschild, 1905
Hosts: *Clethrionomys gapperi* (2, 3)
C. g. saturatus (1)
Clethrionomys spp. (3)
Microtus longicaudus (2, 3)
M. montanus canescens (3)
Microtus spp. (3)
Mus musculus (3)
Mus spp. (3)
Mustela spp. (3)
Peromyscus maniculatus (2, 3)
P. m. artemisiae (2, 3)
P. m. austerus (2, 3)
P. m. borealis (2)
P. m. interdictus (2)
P. m. oreas (2)
P. sitkensis (3)
Peromyscus spp. (2, 3)
Phenacomys intermedius (3)
Sorex spp. (1, 2)
Spermophilus columbianus (2)
Zapus spp. (3)
Mice (2, 3)
Red-backed vole (3)
Shrew (3)
Dist.: Alta, BC
Records: 1. Rothschild 1905 (BC); 2. Holland 1949 (BC), 3. 1984 (Alta, BC)

Megabothris abantis (Rothschild, 1905)
Syn.: *Ceratophyllus abantis* Rothschild, 1905
Trichopsylla abantis (Rothschild, 1905)
Hosts: *Clethrionomys gapperi* (6, 7)
C. g. saturatus (6)
Clethrionomys spp. (7)
Eutamias spp. (6)
Lepus americanus (6, 7)
Microtus longicaudus (6, 7)
M. l. macrurus (6, 7)
M. oregoni serpens (2, 6, 7)
M. pennsylvanicus (7)
M. p. drummondii (1, 7)
M. richardsoni (7)
M. r. richardsoni (6)
M. townsendii (2)
M. t. townsendii (7)
Microtus spp. (6, 7)
Mustela erminea (6)
M. e. cicognanii (4)
M. e. fallenda (6)
M. frenata (1, 2, 5, 7)
M. f. oribasa (6, 7)
Mustela spp. (7)
Neotoma cinerea (6, 7)
N. c. drummondii (7)
N. c. occidentalis (6)
Ochotona princeps (6)
O. p. princeps (6)
Ochotona spp. (7)
Peromyscus maniculatus (3, 6, 7)
P. m. alpinus (7)
P. m. artemisiae (6)
P. m. austerus (6)
P. m. borealis (6)
P. m. oreas (6)
Peromyscus spp. (6, 7)
Phenacomys intermedius (6, 7)
P. i. intermedius (6)
Rattus norvegicus (4, 6, 7)
Sorex spp. (7)
Spermophilus c. columbianus (6)
Synaptomys borealis truei (6)
Synaptomys spp. (6, 7)
Tamiasciurus hudsonicus (7)
T. h. streatori (2)
Thomomys spp. (7)
Vulpes vulpes (6)
Zapus hudsonius (7)
Z. princeps idahoensis (6)
Z. t. trinotatus (6)
Zapus spp. (6, 7)
Chipmunk (7)
Mouse (6)
Dist.: Alta, BC, YT
Records: 1. Rothschild 1905 (Alta, BC); 2. Wagner 1936a (BC), 3. 1936b (BC); 4. Holland 1942 (Alta, BC); 5. Brown 1944 (Alta); 6. Holland 1949 (Alta, BC), 7. 1984 (Alta, BC, YT)

Megabothris acerbus (Jordan, 1925) Jordan, 1933
Syn.: *Ceratophyllus acerbus* Jordan, 1925
Trichopsylla acerba (Jordan, 1925)
Hosts: *Clethrionomys* spp. (5)
Eutamias minimus (5)
Sciurus carolinensis (5)
Tamias striatus (1, 4, 5)
T. s. griseus (3)
T. s. lysteri (2)
Tamias spp. (5)
Chipmunk (3, 5)
Dist.: Man, Ont
Records: 1. Jordan 1925 (unspecified); 2. Jameson 1943 (Ont); 3. Holland 1949 (Ont); 4. Scholten et al. 1962 (Ont); 5. Holland 1984 (Man, Ont)

Megabothris asio (Baker, 1904)
Syn.: *Ceratophyllus asio* Baker, 1904
Hosts: *Clethrionomys gapperi* (3)
C. g. ungava (2)
Microtus pennsylvanicus (3, 5)
M. p. drummondii (1)
M. p. enixus (2)
Phenacomys intermedius celatus (2)
Zapus hudsonicus (4, 5)
Dist.: NB, Nfld, NS, NWT, Ont
Records: 1. Harper 1956 (NWT); 2. Gabbutt 1961 (Nfld); 3. Scholten et al. 1962 (Ont); 4. Jones and Thomas 1982 (NS); 5. Whitaker and French 1982 (NB)

Megabothris asio asio (Baker, 1904) Jordan, 1933
Syn.: *Trichopsylla asio asio* (Baker, 1904)
Hosts: *Blarina brevicauda* (4)
Blarina spp. (11)
Clethrionomys gapperi (11)
C. g. proteus (3, 11)
C. g. ungava (11)
Condylura cristata (9, 10, 11)
Mephitis mephitis (4)
Microtus pennsylvanicus (7, 8, 9, 11)
M. p. enixus (6)
M. p. pennsylvanicus (2)
M. p. terraenovae (3)
Microtus spp. (11)
Mus musculus (11)
Mustela erminea (11)
Mustela spp. (1, 5, 11)
Napaeozapus insignis (9)
Peromyscus spp. (11)
Phenacomys intermedius celatus (11)
Phenacomys spp. (11)
Rattus spp. (11)
Sorex spp. (11)
Synaptomys borealis medioxinus (6)
S. cooperi (9, 11)
Synaptomys spp. (11)
Zapus hudsonius (9, 11)
Zapus spp. (11)
Lemming (11)
Meadow vole (11)
Dist.: Alta, NB, Nfld, NS, Ont, PEI, Que
Records: 1. Brown 1944 (Alta); 2. Baker 1946 (Que); 3. Holland 1950 (Nfld, Que); 4. Judd 1953 (Ont); 5. Brown 1955 (NB); 6. Harper 1961 (Nfld); 7. Robert 1962 (Que); 8. Brown 1968 (NB); 9. Wright 1979 (NS); 10. Whitaker and French 1982 (NB); 11. Holland 1984 (NB, Nfld, NS, Ont, PEI, Que)

Megabothris asio megacolpus (Jordan, 1929)
Hosts: *Blarina brevicauda manitobensis* (5)
Clethrionomys gapperi (4, 5)
C. g. athabascae (5)
C. g. loringi (5)
C. rutilus (5)
C. r. dawsoni (5)
Clethrionomys spp. (5)
Dicrostonyx groenlandicus richardsoni (3, 5)
D. hudsonicus (3)
Dicrostonyx spp. (3, 5)
Eutamias minimus borealis (3)
Eutamias spp. (5)
Microtus ochrogaster (5)
M. oeconomus (5)
M. pennsylvanicus (3, 5)
M. p. drummondii (1, 3, 5)
M. p. labradorius (3)
Microtus spp. (3, 5)
Mustela erminea (5)
M. frenata (5)
Mustela spp. (2, 3, 5)
Peromyscus maniculatus (5)
P. m. bairdii (5)
P. m. borealis (1, 3)
Peromyscus spp. (5)
Phenacomys spp. (5)
Sorex palustris (5)
Spermophilus r. richardsonii (3)
Synaptomys borealis (5)
Synaptomys spp. (5)
Tamias striatus (4)
T. s. griseus (5)
Tamiasciurus hudsonicus (5)
Zapus hudsonius (5)
Zapus spp. (3)
Weasel (5)
Dist.: Alta, BC, Man, NWT, Ont, Que, Sask, YT Records: 1. Jordan 1929 (BC); 2. Brown 1944 (Alta); 3. Holland 1950 (Alta, BC, Man, NWT, Ont, Que, Sask); 4. Buckner 1964 (Man); 5. Holland 1984 (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

Remarks: Holland (1984) re-examined Browns' (1944) specimens of *Trichopsylla asio asio* and found them to be *Megabothris asio megacolpus*.

Megabothris atrox (Jordan, 1925)
Syn.: *Ceratophyllus atrox* Jordan, 1925
Hosts: *Martes americana* (3)
Mustela erminea (4)
M. vison (5)
Mustela spp. (1, 2, 5)
Spermophilus franklinii (5)
Marten (5)
Mink (5)
Dist.: Alta, Man, Ont
Records: 1. Jordan 1925 (Alta); 2. Brown 1944 (Alta); 3. DeVos 1957 (Ont); 4. Wilson 1967 (Ont); 5. Holland 1984 (Alta, Man, Ont)

Megabothris calcarifer gregsoni Holland, 1950
Hosts: *C. rutilus* (2, 3)
C. r. dawsoni (1, 3)
Clethrionomys spp. (3)
Dicrostonyx groenlandicus (3)
Dicrostonyx spp. (3)
Lemmus sibiricus (1, 3)

Lemmus spp. (3)
Lepus americanus dalli (3)
Microtus longicaudus (3)
M. miurus (3)
M. oeconomus (3)
M. pennsylvanicus (3)
M. p. drummondii (1, 3)
M. xanthognathus (3)
Microtus spp. (1, 3)
Mustela erminea (3)
M. nivalis rixosa (3)
Peromyscus maniculatus (3)
Synaptomys borealis (3)
Dist.: NWT, YT
Records: 1. Holland 1950 (NWT); 2. Mitchell and Behin 1965 (NWT); 3. Holland 1984 (NWT, YT)

Megabothris clantoni clantoni Hubbard, 1949
Syn.: *Megabothris obscurus* Holland, 1949
Host: *Lagurus curtatus*
Dist.: BC
Record: Holland 1984

Megabothris groenlandicus (Wahlgren, 1903)
Syn.: *Megabothris immitis* (Jordan)
Hosts: *Clethrionomys rutilus* (2)
Dicrostonyx groenlandicus (1)
D. g. kilangmiutak (1)
D. g. richardsoni (1, 2)
D. hudsonius (2)
Dicrostonyx spp. (1, 2)
Lemmus sibiricus (2)
L. s. trimucronatus (1, 2)
Lemmus spp. (1, 2)
Microtus miurus (2)
M. pennsylvanicus (1, 2)
M. xanthognathus (2)
Microtus spp. (1, 2)
Mustela erminea (1, 2)
Mustela spp. (2)
Peromyscus spp. (2)
Spermophilus parryii (1, 2)
Synaptomys spp. (2)
Dist.: Man, Nfld, NWT, Que, YT
Records: 1. Holland 1952a (Man, NWT, Que), 2. 1984 (Man, Nfld, NWT, Que, YT)

Megabothris lucifer (Rothschild, 1905)
Syn.: *Ceratophyllus lucifer* Rothschild, 1905
Hosts: *Clethrionomys richardsoni* (6)
Eutamias spp. (6)
Microtus montanus canescens (3, 6)
M. ochrogaster minor (6)
M. pennsylvanicus (6)
M. p. drummondii (1, 4, 5)
Microtus spp. (2, 6)
Mustela frenata (5)
M. f. longicauda (5)
M. f. nevadensis (6)
Peromyscus maniculatus nebrascensis (5)
Peromyscus spp. (6)
Spermophilus r. richardsonii (5)
Synaptomys spp. (6)
Dist.: Alta, BC, Man, Sask
Records: 1. Rothschild 1905 (Alta); 2. Wagner 1936 (BC); 3. Holland 1941a (BC); 4. Brown 1944 (Alta); 5. Holland 1949 (Alta, BC, Sask), 6. 1984 (Alta, BC, Man, Sask)

Megabothris quirini (Rothschild, 1905)
Syn.: *Ceratophyllus quirini* Rothschild, 1905
Trichopsylla quirini (Rothschild, 1905)
Hosts: *Blarina brevicauda* (18, 20)
B. b. manitobensis (17)
Clethrionomys gapperi (7, 8, 13, 14, 16, 18, 20)
C. g. athabascae (7, 10, 20)
C. g. gapperi (7, 12)
C. g. gaspeanus (16)
C. g. loringi (1, 6, 14, 20)
C. g. proteus (12, 20)
C. g. saturatus (1, 7)
C. g. ungava (11, 12, 20)
C. rutilus (20)
C. r. dawsoni (9, 20)
Clethrionomys spp. (20)
Dicrostonyx hudsonius (11, 20)
Dicrostonyx spp. (20)
Eutamias minimis (14, 20)
E. m. borealis (7, 14)
Eutamius spp. (20)
Lemmus sibiricus (20)
Mephitis m. mephitis (7)
Microtus chrotorrhinus (18)
M. longicaudus (20)
M. l. vellerosus (20)
M. ochrogaster (20)
M. oeconomus (20)
M. o. operarius (20)
M. pennsylvanicus (13, 14, 18, 20)
M. p. drummondii (3, 5, 7, 10, 14, 20)
M. p. enixus (11)
M. p. insperatus (7)
M. p. labradorius (20)
M. p. pennsylvanicus (7)
Microtus spp. (7, 20)
Mustela erminea (7, 15, 20)
M. e. richardsonii (20)
M. frenata longicauda (7)
Napaeozapus insignis (13, 18, 20)
N. i. frutectanus (7)
N. i. insignis (16, 20)
Napaeozapus spp. (20)
Neotoma cinerea (20)
Ochotona collaris (20)
Peromyscus leucopus (18, 20)
P. maniculatus (7, 13, 16, 18, 20)
P. m. algidus (20)
P. m. artemisiae (7)
P. m. bairdii (14, 20)
P. m. borealis (7, 20)
Peromyscus spp. (20)
Phenacomys intermedius celatus (11, 20)

Phenacomys spp. (20)
Rattus norvegicus (13)
Sorex cinereus (20)
S. c. cinereus (14, 20)
Spermophilus franklinii (7)
S. parryii (20)
Sylvilagus nuttallii grangeri (7)
Synaptomys borealis (19, 20)
S. cooperi (19)
Tamiasciurus hudsonicus (8, 14, 20)
T. h. columbiensis (7)
T. h. gymnicus (16)
T. h. hudsonicus (7, 14)
T. h. laurentianus (4)
Tamiasciurus spp. (20)
Tamias striatus (7, 20)
T. s. griseus (20)
Zapus hudsonius (8, 16, 18, 20)
Z. princeps (20)
Z. p. minor (7)
Zapus spp. (7, 20)
Unspecified (2)

Dist.: Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT

Records: 1. Rothschild 1905 (Alta); 2. Jordan 1929 (BC), 3. 1932 (BC); 4. Eidmann 1935 (Que); 5. Wagner 1936 (BC); 6. Brown 1944 (Alta); 7. Holland 1949 (Alta, BC, NWT, Ont); 8. Hubbard 1949 (Ont); 9. Judd 1955 (NWT); 10. Harper 1956 (NWT); 11. Gabbutt 1961 (Nfld); 12. Harper 1961 (Nfld, Que); 13. Robert 1962 (Que); 14. Buckner 1964 (Man); 15. Wilson 1967 (Ont); 16. Brown 1968 (NB); 17. Buckner and Blasko 1969 (Man); 18. Wright 1979 (NS); 19. Whitaker and French 1982 (NB); 20. Holland 1984 (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Remarks: Rothschild (1905) and Brown (1944) reported the hosts as *Evotomys gapperi* and *E. saturatus*. Holland (1984) felt that both were probably *Clethrionomys gapperi loringi*.

Monopsyllus ciliatus protinus (Jordan, 1929)

Hosts: *Eutamias amoenus* (3, 5)
E. a. felix (3)
E. townsendii (3, 5)
E. t. cooperi (1, 2)
Eutamias spp. (5)
Glaucomys sabrinus (3)
G. s. oregonensis (4)
Lepus americanus (3, 5)
Marmota caligata (5)
Martes americana caurina (3)
Microtus oregoni serpens (5)
Mustela erminea anguinae (3)
M. e. fallenda (3)
Ochotona princeps (5)
Ochotona spp. (5)
Peromyscus maniculatus (3, 5)
P. m. austerus (3)
P. m. oreas (3)
Peromyscus spp. (5)
Procyon spp. (5)
Spilogale putorius gracilis (3)
S. p. latifrons (5)
S. p. phenax (5)
Sylvilagus floridanus (5)
Tamiasciurus douglasii (5)
T. d. mollipilosus (2, 3)
T. hudsonicus (1, 5)
T. h. lanuginosus (3, 5)
T. h. picatus (5)
Tamiasciurus spp. (3, 5)
Field mouse (5)
Red squirrel (5)
Squirrel (5)
Weasel (5)

Dist.: BC

Records: 1. Jordan 1929: 2. Wagner 1936a; 3. Holland 1949; 4. Spencer 1956; 5. Holland 1984

Monopsyllus eumolpi (Rothschild, 1905)

Syn.: *Ceratophyllus eumolpi* Rothschild, 1905

Hosts: *Clethrionomys gapperi* (4)
Eutamias amoenus affinis (1, 2, 4)
E. a. ludibundus (4)
E. a. luteiventris (4)
E. minimus borealis (1, 4)
E. m. selkirki (4)
Eutamias spp. (1, 4)
Mustela frenata (4)
Ochotona princeps fenisex (4)
Spermophilus c. columbianus (3, 4)
Tamiasciurus hudsonicus (4)
T. h. streatori (2, 4)
Zapus princeps minor (4)

Dist.: Alta, BC, Ont, Sask

Records: 1. Rothschild 1905 (Alta, BC); 2. Wagner 1936a (BC); 3. Holland 1944 (BC), 4. 1949 (Alta, BC, Ont, Sask)

Monopsyllus eumolpi eumolpi (Rothschild, 1905)

Syn.: *Ceratophyllus eumolpi eumolpi* (Rothschild, 1905)
Monopsyllus eumolpi canadensis Hubbard, 1949
Trichopsylla eumolpi eumolpi (Rothschild, 1905)

Hosts: *Eutamias amoenus* (7)
E. a. affinis (7)
E. a. luteiventris (7)
E. minimus (3, 5, 6, 7)
E. m. borealis (7)
E. m. minimus (7)
Eutamias spp. (2, 7)
Glaucomys sabrinus (7)
Microtus oeconomus macfarlani (7)
M. pennsylvanicus drummondii (1)
Neotoma cinerea (7)
Neotoma spp. (7)
Ochotona princeps brooksi (7)
Ochotona spp. (7)
Peromyscus maniculatus (7)
P. m. artemisiae (7)

Spermophilus columbianus (7)
Tamiasciurus hudsonicus (3, 7)
Tamiasciurus spp. (7)
Tamias striatus (3, 7)
Chipmunk (4, 7)
Red squirrel (7)
Dist.: Alta, BC, Man, NWT, Ont, Sask, YT
Records: 1. Jordan 1932 (BC); 2. Brown 1944 (Alta); 3. Hubbard 1949a (Ont), 4. 1949b (Ont); 5. Buckner 1964 (Man); 6. Wilson 1967 (Ont); 7. Holland 1984 (Alta, BC, Man, NWT, Ont, Sask, YT)

Remarks: *Microtus oeconomus macfarlani* is given by Holland (1984) as *M. oregoni macfarlani*. The geographical record suggests *M. oeconomus macfarlani* is the proper classification.

Monopsyllus thambus (Jordan, 1929)
Syn.: *Ceratophyllus bakeri* Wagner, 1934
Ceratophyllus thambus Jordan, 1929
Hosts: *Clethrionomys gapperi* (6)
C. rutilus (6)
Lynx canadensis (3)
Lynx spp. (1)
Microtus spp. (6)
Peromyscus maniculatus (5,6)
P. m. algidus (6)
P. m. borealis (6)
House mouse (2)
Mouse (4, 6)
Dist.: Alta, BC, Nfld, NWT, Que, Sask, YT
Records: 1. Jordan 1929 (Alta); 2. Wagner 1933 (Nfld); 3. Brown 1944 (Alta); 4. Holland 1944 (NWT), 5. 1949 (NWT, Sask), 6. 1984 (Alta, BC, Nfld, NWT, Que, YT)

Monopsyllus tolli (Wagner, 1901)
Hosts: *Eutamias minimus borealis* (2)
Ochotona collaris (1, 2)
Dist.: YT
Records: 1. Holland 1952a, 2. 1984

Monopsyllus vison (Baker, 1904)
Syn.: *Ceratophyllus vison* (Baker, 1904)
Trichopsylla vison Baker, 1904
Hosts: *Clethrionomys gapperi* (15, 16)
C. g. loringi (16)
C. rutilus (16)
C. r. dawsoni (16)
Clethrionomys spp. (16)
Eutamias minimus borealis (16)
Eutamias spp. (3)
Glaucomys sabrinus (16)
Glaucomys spp. (16)
Lepus americanus (8)
Lepus spp. (16)
Lynx canadensis (11)
Martes americana (7, 16)
M. a. americana (14)
Mephitis mephitis (16)
Microtus longicaudus (16)
M. pennsylvanicus (16)
Microtus spp. (16)
Mustela erminea (12, 16)
M. e. arctica (16)
M. e. cicognanii (16)
M. e. invicta (16)
M. frenata (2)
M. vison (16)
M. v. energumenos (16)
Mustela spp. (16)
Peromyscus leucopus (15)
P. maniculatus (15, 16)
Peromyscus spp. (16)
Procyon lotor (15, 16)
Sciurus carolinensis (16)
Spermophilus c. columbianus (16)
S. parryii plesius (16)
Spermophilus spp. (16)
Tamiasciurus hudsonicus (3, 4, 5, 6, 8, 9, 10, 13, 15, 16)
T. h. baileyi (16)
T. h. columbiensis (16)
T. h. gymnicus (5)
T. h. hudsonicus (16)
T. h. minnesota (16)
T. h. picatus (16)
T. h. preblei (16)
T. h. richardsoni (16)
T. h. streatori (2, 16)
T. h. ungavensis (16)
Tamiasciurus spp. (16)
Tamias striatus (8)
Vulpes vulpes (16)
Red squirrel (16)
Short-tailed weasel (16)
Squirrel (5, 16)
Weasel (16)
Unspecified (1)
Dist.: Alta, BC, Man, Nfld, NB, NS, NWT, Ont, Que, Sask, YT
Records: 1. Jordan 1929 (Alta, BC); 2. Wagner 1936a (BC); 3.Brown 1944 (Alta); 4. Hubbard 1949 (Ont); 5. Brown 1955 (NB); 6. Judd 1955 (NWT); 7. DeVos 1957 (Ont); 8. Scholten et al. 1962 (Ont); 9. Buckner 1964 (Man); 10. Mitchell and Behin 1965 (NWT); 11. van Zyll De Jong 1966 (Alta); 12. Wilson 1967 (Ont); 13. Mahrt and Chai 1972 (Alta); 14. Holland 1979 (Ont); 15. Wright 1979 (NS); 16. Holland 1984 (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

Monopsyllus wagneri ophidius (Jordan)
Hosts: *Microtus oregoni serpens*
Microtus spp.
Peromyscus maniculatus
P. m. austerus
P. m. oreas
Peromyscus spp.
Tamiasciurus douglasii
Dist.: BC
Record: Holland 1984

Monopsyllus wagneri systaltus (Jordan)
Hosts: *Blarina brevicauda manitobensis* (3)
Clethrionomys gapperi (2, 4)
C. g. loringi (4)
Clethrionomys spp. (4)
Dipodomys ordii (4)
Lagurus curtatus (4)
Microtus ochrogaster (4)
M. pennsylvanicus (4)
Microtus spp. (4)
Mus musculus (4)
Peromyscus maniculatus (2, 4)
P. m. bairdii (4)
P. m. nebrascensis (4)
Peromyscus spp. (1, 4)
Sorex arcticus (2, 4)
S. cinereus (2, 4)
Zapus spp. (4)
House mouse (4)
Dist.: Alta, Man, Ont, Sask
Records: 1. Brown 1944 (Alta); 2 Buckner 1964 (Man); 3, Buckner and Blasko 1969 (Man); 4. Holland 1984 (Alta, Man, Ont, Sask)

Monopsyllus wagneri wagneri (Baker, 1904)
Hosts: *Eutamias* spp. (2)
Microtus spp. (2)
Mustela frenata arizonensis (1)
Neotoma cinerea drummondii (2)
Neotoma spp. (2)
Peromyscus maniculatus (2)
P. m. alpinus (2)
P. m. artemisiae (2)
P. m. borealis (2)
P. m. maniculatus (2)
Permoyscus spp. (1, 2)
Synaptomys borealis (2)
Synaptomys spp. (2)
Tamiasciurus hudsonicus (2)
Thomomys talpoides (2)
Zapus spp. (2)
Mice (2)
Rabbit (2)
Weasel (2)
Dist.: Alta, BC
Records: 1. Wagener 1936a (BC); 2. Holland 1984 (Alta, BC)

Nosopsyllus fasciatus (Bosc, 1801) Jordan, 1933
Syn.: *Ceratophyllus canadensis* Baker, 1904
Ceratophyllus fasciatus (Bosc, 1801)
Pulex fasciatus Bosc, 1801
Hosts: *Blarina brevicauda* (11)
Clethrionomys gapperi (11)
Microtus p. pennsylvanicus (6)
M. townsendii tetramerus (11)
Mus musculus (5)
Peromyscus maniculatus (7)
Rattus norvegicus (2, 3, 4, 5, 7, 8, 9, 10, 11)
R. rattus alexandrinus (5)
R. r. rattus (5)
Rattus spp. (7, 11)
Sorex spp. (7)
Tamiasciurus douglasii mollipilosus (7)
Mice (7)
Unspecified (1)
Dist.: BC, Man, NB, Nfld, NS, Ont, Que, Sask
Records: 1. Baker 1904 (Ont); 2. Spencer 1937 (BC); 3. 1939b (BC); 4. Holland 1940c (BC), 5. 1941b (BC); 6. Baker 1946 (Que); 7. Holland 1949 (BC, Ont, Que, Sask); 8. Judd 1950 (Ont); 9. Brown 1968 (NB); 10. Wright 1979 (NS); 11. Holland 1984 (BC, Man, Nfld, NS, Ont, Que)

Opisocrostis bruneri (Baker, 1895)
Syn.: *Ceratophyllus bruneri* (Baker, 1904)
Ceratophyllus saundersi (Jordan, 1933)
Oropsylla bruneri (Baker, 1904)
Pulex bruneri Baker, 1895
Hosts: *Eutamias minimus borealis* (5)
Marmota monax (6)
Microtus pennsylvanicus (10)
Spermophilus columbianus (3)
S. franklinii (2, 5, 6, 9, 10)
S. richardsonii (1, 2, 4, 5, 6, 7, 10)
S. r. richardsonii (10)
S. tridecemlineatus (2, 3, 4, 5, 6, 8, 10)
S. t. tridecemlineatus (4, 7, 10)
Tamiasciurus hudsonicus (8)
T. h. hudsonicus (7, 10)
Taxidea taxus (5, 10)
Bush rabbit (5)
Dist.: Alta, Man, Sask
Records: 1. Jordan 1933 (Sask); 2. McLeod 1933 (Man); 3. Holland 1943 (Alta); 4. Brown 1944 (Alta); 5. Holland 1944 (unspecified), 6. 1949 (Alta, Man, Sask), 7. 1952a (Sask); 8. Buckner 1964 (Man); 9. Hilton and Mahrt 1971 (Alta); 10. Holland 1984 (Alta, Man, Sask)

Opisocrostis labis (Jordan and Rothschild, 1922)
Syn.: *Ceratophyllus labis* Jordan and Rothschild, 1922
Hosts: *Cynomys ludovicianus* (7)
C. l. ludovicianus (5)
Mustela frenata longicauda (1, 3, 5)
Spermophilus franklinii (5)
S. richardsonii (2, 4, 5, 6, 7)
S. r. richardsonii (7)
Taxidea t. taxus (5)
Ground squirrels (2)
Dist.: Alta, Sask
Records: 1. Jordan and Rothschild 1922 (Alta); 2. Gibbons and Humphreys 1941 (Alta); 3. Brown 1944 (Alta); 4. Holland 1944 (Alta, Sask), 5. 1949 (Alta, Sask); 6. Hilton and Mahrt 1971 (Alta); 7. Holland 1984 (Alta, Sask)

Opisocrostis tuberculatus tuberculatus (Baker, 1904)
Syn.: *Ceratophyllus tuberculatus* Baker, 1904
Oropsylla tuberculata tuberculata (Baker, 1904)

Hosts: *Cynomys l. ludovicianus* (5)
Lepus spp. (3)
Microtus spp. (7)
Ochotona collaris (7)
Spermophilus columbianus (3, 6, 7)
S. c. columbianus (1, 4, 5)
S. franklinii (4)
S. parryii (7)
S. richardsonii (3, 5, 6, 7)
S. r. richardsonii (2, 4, 7)
S. tridecemlineatus (5)
S. t. tridecemlineatus (4)
Tamiasciurus hudsonicus (7)
Dist.: Alta, BC, Sask, YT
Records: 1. Holland 1940c (Alta); 2. Gibbons and Humphreys 1941 (Alta); 3. Brown 1944 (Alta); 4. Holland 1944 (Alta, BC, Sask), 5. 1949 (Alta, BC, Sask); 6. Hilton and Mahrt 1971 (Alta); 7. Holland 1984 (Alta, BC, Sask, YT)

Opisodasys keeni keeni (Baker, 1896)
Syn.: *Pulex keeni* Baker, 1896
Hosts: *Clethrionomys gapperi* (4)
Clethrionomys spp. (3, 4)
Eutamias spp. (4)
Microtus longicaudus (4)
M. oregoni serpens (3, 4)
M. townsendii (4)
M. t. townsendii (3)
Microtus spp. (3)
Neotoma cinerea (4)
Peromyscus maniculatus (2, 3)
P. m. alpinus (3, 4)
P. m. artemisiae (3, 4)
P. m. austerus (3, 4)
P. m. borealis (3)
P. m. interdictus (3)
P. m. keeni (1, 3)
P. m. oreas (3, 4)
P. sitkensis (4)
Peromyscus spp. (3, 4)
Zapus spp. (3)
Chipmunk (4)
Weasel (3)
Dist.: Alta, BC
Records: 1. Baker 1896 (BC); 2. Wagner 1936a (BC); 3. Holland 1949 (Alta, BC), 4. 1984 (Alta, BC)

Opisodasys pseudarctomys (Baker, 1904)
Syn.: *Ceratophyllus pseudarctomys* Baker, 1904
Hosts: *Clethrionomys gapperi* (3)
Glaucomys sabrinus (1, 3, 5, 6, 9, 10)
G. s. alpinus (2)
G. s. canescens (7, 10)
G. s. columbiensis (3, 10)
G. s. macrotis (3, 8)
G. s. makkovikensis (4)
G. volans (10)
Glaucomys spp. (3, 10)
Lynx rufus (10)
Microtus pennsylvanicus (10)
Mustela frenata noveboracensis (10)
Tamiasciurus hudsonicus (3, 5, 6, 10)
T. h. streatori (3)
Dist.: Alta, BC, Man, NB, Nfld, NS, Ont, Que
Records: 1. Rothschild 1905 (BC); 2. Holland 1941a (BC), 3. 1949 (Alta, Ont); 4. Harper 1961 (Nfld); 5. Robert 1962 (Que); 6. Scholten et al. 1962 (Ont); 7. Buckner 1964 (Man); 8. Brown 1968 (NB); 9. Wright 1979 (NS); 10. Holland 1984 (Alta, BC, Man, NS, Ont, Que)

Remarks: Holland (1984) used *Lynx fasciatus pallidus* instead of *Lynx rufus*.

Opisodasys vesperalis (Jordan, 1929)
Syn.: *Ceratophyllus vesperalis* Jordan, 1929
Hosts: *Glaucomys sabrinus* (3, 4, 6)
G. s. alpinus (2, 4)
G. s. columbiensis (1, 4, 6)
G. s. fuliginosus (4)
G. s. oregonensis (5, 6)
Lepus americanus columbiensis (6)
Lynx canadensis (4)
Tamiasciurus douglasii (6)
Weasel (4)
Dist.: BC
Records: 1. Jordan 1929; 2. Wagner 1940; 3. Holland 1941, 4. 1949; 5. Spencer 1956; 6. Holland 1984

Remarks: According to Holland (1984), Wagner (1940) identified the specimen as *Opisodasys pseudarctomys* by mistake.

Orchopeas caedens (Jordan, 1925)
Hosts: *Martes americana* (1)
Tamiasciurus hudsonicus (2, 3)
Dist.: Alta, NWT, Ont
Remarks: 1. Brown 1944 (Alta); 2. Judd 1955 (NWT); 3. Scholten et al. 1962 (Ont)

Orchopeas caedens caedens (Jordan, 1925)
Syn.: *Ceratophyllus caedens* (Jordan, 1925)
Hosts: *Eutamias* spp. (6)
Glaucomys sabrinus (4, 6)
Glaucomys spp. (6)
Martes americana (1, 6)
M. a. actuosa (6)
Mustela erminea (6)
M. e. cicognanii (6)
M. e. invicta (6)
M. e. richardsonii (6)
M. frenata longicauda (6)
M. vison (2, 6)
Peromyscus maniculatus (6)
Spermophilus franklinii (2)
S. parryii (6)
Tamiasciurus hudsonicus (2, 3, 4, 5, 6)
T. h. preblei (2)
Tamiasciurus spp. (6)
Vulpes vulpes (2)
Pine marten (6)

Red squirrel (6)
Tree squirrel (6)
Weasel (2, 6)
Dist.: Alta, BC, Man, Nfld, NWT, Que, Sask, YT
Records: 1. Jordan 1925 (Alta); 2. Holland 1949 (Alta, BC, NWT, Sask, YT); 3. Gabbutt 1961 (Nfld); 4. Buckner 1964 (Man); 5. Mahrt and Chai (Alta); 6. Holland 1984 (Alta, BC, Man, Que, YT)

Orchopeas caedens durus (Jordan, 1929)
Syn.: *Ceratophyllus caedens durus* Jordan, 1929
Hosts: *Clethrionomys gapperi* (12)
Clethrionomys spp. (15)
Eutamias amoenus (4)
Eutamias spp. (6)
Glaucomys sabrinus (6, 14, 15)
Glaucomys spp. (15)
Lynx canadensis (6)
L. rufus (15)
Martes americana (6, 15)
M. a. actuosa (15)
M. a. americana (13)
Mephitis m. mephitis (6)
Mustela erminea (6, 11, 15)
M. e. cicognanii (15)
M. e. richardsonii (12)
M. frenata (1)
M. f. arizonensis (5, 15)
M. f. nevadensis (4)
M. vison (7)
Mustela spp. (1, 6, 15)
Peromyscus maniculatus (14)
P. m. abietorum (12)
Sciurus carolinensis (12, 15)
Tamiasciurus douglasii (15)
T. d. mollipilosus (4, 15)
T. hudsonicus (1, 2, 6, 14)
T. h. columbiensis (6)
T. h. gymnicus (8, 12)
T. h. hudsonicus (6, 15)
T. h. preblei (9)
T. h. streatori (1, 4, 6, 15)
T. h. ungavensis (10)
Tamiasciurus spp. (15)
Tamias striatus (15)
Vulpes vulpes (15)
Chipmunk (15)
Red squirrel (3)
Squirrel (15)
Weasel (3, 15)
Dist.: Alta, BC, NB, Nfld, NS, NWT, Ont, Que, Sask
Records: 1. Jordan 1929 (BC), 2. 1932 (BC); 3. Spencer 1936 (BC); 4. Wagner 1936 (BC); 5. Holland 1938 (BC), 6. 1949 (BC, Nfld, NWT); 7. Judd 1954a (Ont); 8. Brown 1955 (NB); 9. Harper 1956 (NWT), 10. 1961 (Nfld, Que); 11. Wilson 1967 (Ont); 12. Brown 1968 (NB); 13. Holland 1979 (Ont); 14. Wright 1979 (NS); 15. Holland 1984 (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Remarks: Wagner's (1936) record from *T. d. mollipilosus* is possibly a misidentification (Holland 1984).

Orchopeas howardi howardi (Baker, 1895)
Syn.: *Orchopeas wickhami* (Baker, 1895)
Hosts: *Glaucomys volans* (5)
G. v. volans (1, 3, 5)
Sciurus carolinensis (5)
S. niger (5)
Sciurus spp. (5)
Tamiasciurus hudsonicus (4, 5)
T. h. gymnicus (2)
T. h. loquax (1)
Tamias striatus lysteri (1)
Dist.: Alta, Ont, Que
Records: 1. Jameson 1943 (Ont); 2. Baker 1944 (Que); 3. Holland 1949 (Ont); 4. Hubbard 1949a (Ont); 5. Holland 1984 (Alta, Ont)

Orchopeas leucopus (Baker, 1904)
Syn.: *Ceratophyllus leucopus* Baker, 1904
Hosts: *Blarina brevicauda* (6)
B. b. talpoides (4)
Blarina spp. (19)
Clethrionomys gapperi (4, 12, 19)
C. g. gapperi (4)
C. g. loringi (1, 3, 14, 19)
C. g. ochraceus (10)
C. rutilus (19)
Clethrionomys spp. (19)
Glaucomys sabrinus macrotis (4)
G. volans (19)
G. v. volans (19)
Glaucomys spp. (19)
Microtus c. chrotorhinus (4)
M. pennsylvanicus (4, 12, 19)
M. p. drummondii (14, 19)
M. p. pennsylvanicus (4)
Microtus spp. (4, 19)
Mus musculus (4, 19)
Napaeozapus insignis (12)
Ondatra z. zibethicus (4)
P. leucopus (17, 19)
P. l. noveboracensis (2, 4)
P. maniculatus (4, 5, 12, 13, 14, 15, 18, 19)
P. m. abietorum (10)
P. m. algidus (19)
P. m. bairdii (4, 12, 19)
P. m. borealis (1, 3, 4, 11, 19)
P. m. gracilis (4)
P. m. nebracensis (4)
Peromyscus spp. (4, 7, 8, 9, 16, 19)
Rattus spp. (19)
Sorex cinereus (19)
S. c. cinereus (14)
Synaptomys spp. (12, 19)
Tamiasciurus hudsonicus (12)
T. h. hudsonicus (12, 16)

Tamias striatus (4, 12)
Tamias spp. (19)
Mice (4)

Dist.: Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT

Records: 1. Rothschild 1905 (Alta); 2. Jameson 1943 (Ont); 3. Brown 1944 (Alta); 4. Holland 1949 (Alta, BC, Man, NWT, Ont, Que, Sask, YT); 5. Hubbard 1949a (Ont); 6. Jameson 1950 (Ont); 7. Judd 1950 (Ont), 8. 1953 (Ont), 9. 1954a (Ont); 10. Brown 1955 (NB); 11. Judd 1955 (NWT); 12. Robert 1962 (Que); 13. Scholten et al. 1962 (Ont); 14. Buckner 1964 (Man); 15. Brown 1968 (NB); 16. Buckner and Blasko 1969 (Man); 17. Wright 1979 (NS); 18. Whitaker and French 1982 (NB); 19. Holland 1984 (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

Remarks: Brown (1944) and Rothschild (1905) reported their hosts as *Evotomys gapperi saturatus* and *Evotomys saturatus*, respectively. Holland (1984) reported *Peromyscus* sp. and *P. arcticus*. The validity of *P. arcticus* is uncertain so we have included both under *Peromyscus* spp.

Orchopeas nepos (Rothschild, 1905)

Hosts: *Glaucomys sabrinus oregonensis* (3)
Mustela erminea fallenda (3)
M. vison energumenos (3)
Sciurus carolinensis (4)
Spilogale putorius (1, 3)
Tamiasciurus douglasii (4)
T. d. mollipilosus (2, 3)
Tamiasciurus spp. (4)
Weasel (3, 4)

Dist.: BC

Records: 1. Rothschild 1905; 2. Wagner 1936a; 3. Holland 1949, 4. 1984

Remarks: Holland (1949) records *Spilogale putorius* as *S. gracilis olympica*.

Orchopeas sexdentatus agilis (Rothschild, 1905)

Syn.: *Ceratophyllus agilis* Rothschild, 1905

Hosts: *Clethrionomys gapperi* (7)
C. g. saturatus (5)
Eutamias minimus (7)
Lepus americanus columbiensis (7)
Lynx spp. (7)
Martes americana (7)
Microtus longicaudus (5)
Mustela frenata (1, 5, 7)
M. f. arizonensis (7)
M. f. longicauda (4)
M. f. nevadensis (2, 7)
M. vison energumenos (7)
Neotoma cinerea (1, 4, 6, 7)
N. c. cinerea (7)
N. c. drummondii (7)
N. c. occidentalis (2, 3, 5, 7)
Neotoma spp. (7)
Ochotona princeps (1, 2, 4, 5, 7)
O. p. brooksi (7)
Ochotona spp. (7)
Peromyscus spp. (7)
Sciurus spp. (7)
Spilogale putorius (5)
Sylvilagus n. nuttallii (5)
Tamiasciurus hudsonicus (7)
T. h. preblei (1, 7)
T. h. richardsoni (4)
Skunk (7)
Weasel (5, 7)
Wood rat (7)

Dist.: Alta, BC, YT

Records: 1. Rothschild 1905 (Alta, BC); 2. Wagner 1936 (BC); 3. Holland 1938 (BC); 4. Brown 1944 (Alta); 5. Holland 1949 (BC), 6. 1952b (Alta), 7. 1984 (Alta, BC, YT)

Remarks: Holland (1949) records *Spilogale putorius* as *S. gracilis olympica*. Holland's (1952) specimens were taken from the nest of *N. cinerea*. Holland (1984) records four hosts: *Mustela frenata arizonensis* (= *M. arizonensis*) and *Neotoma cinerea occidentalis* (= *N. c. saxamans*).

Oropsylla alaskensis (Baker, 1904)

Syn.: *Ceratophyllus alaskensis* Baker, 1904

Hosts: *Alopex lagopus* (4)
A. l. lagopus (2, 4)
Dicrostonyx spp. (4)
Lynx canadensis (4)
Mustela erminea arctica (2)
Spermophilus parryii (4)
S. p. parryii (1, 3)
Spermophilus spp. (1, 4)
Ground squirrel (4)

Dist.: NWT, YT

Records: 1. Holland 1944 (NWT); 2. Jellison 1945 (NWT); 3. Holland 1949 (NWT), 4. 1984 (NWT, YT)

Oropsylla arctomys (Baker, 1904)

Syn.: *Atheopsylla septentrionalis* Stewart and Holland, 1940
Ceratophyllus arctomys Baker, 1904

Hosts: *Alopex l. lagopus* (17)
Canis latrans (5, 17)
Glaucomys volans (17)
Marmota caligata (6)
M. c. okanagona (5)
M. monax (6, 10, 13, 16, 17)
M. m. canadensis (11, 12, 17)
M. m. petrensis (1, 2, 3, 5)
M. m. rufescens (6, 8, 17)
Marmota spp. (5, 7, 17)
Martes americana (17)
M. a. americana (15)
M. pennanti (17)
M. p. pennanti (6, 17)
Mephitis m. mephitis (6)
Mephitis spp. (17)
Peromyscus maniculatus (17)

Spermophilus columbianus (17)
S. franklinii (17)
Spermophilus richardsonii (4)
Sylvilagus spp. (6)
Tamiasciurus hudsonicus (17)
Taxidea t. taxus (6)
Ursus americanus (14)
Vulpes vulpes (6, 9, 11, 17)
Bear (6)

Dist.: Alta, BC, Man, NB, NS, NWT, Ont, Que, Sask

Records: 1. Wagner 1936 (BC); 2. Stewart and Holland 1940 (BC); 3. Holland 1949a (BC); 4. Brown 1944 (Alta); 5. Jellison 1945 (BC, Ont, Sask); 6. Holland 1949 (Alta, BC, Man, NB, Ont, Que, Sask); 7. Hubbard 1949 (Ont); 8. Judd 1950 (Ont), 9. 1953 (Ont); 10. Scholten et al. 1962 (Ont); 11. Buckner 1964 (Man); 12. Brown 1968 (NB); 13. Ko 1972b (Ont); 14. Addison et al. 1978 (Ont); 15. Holland 1979 (Ont); 16. Wright 1979 (NS); 17. Holland 1984 (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Remarks: Holland (1984) recorded the host as *Spermophilus columbianus albertae*. The validity of *S. c. albertae* is uncertain so we included it under *S. columbianus*.

Oropsylla idahoensis (Baker, 1904)

Syn.: *Ceratophyllus idahoensis* Baker, 1904
Ceratophyllus poeantis Rothschild, 1905

Hosts: *Eutamias townsendii* (8)
Eutamias spp. (8)
Marmota flaviventris avara (8)
Marmota spp. (1)
Microtus longicaudus (6)
Mustela frenata (8)
M. f. longicauda (1)
M. f. oribasus (6)
Mustela spp. (8)
Ochotona collaris (8)
O. princeps (8)
O. p. princeps (6)
Spermophilus columbianus (1,2,3,5,6,7,8)
S. c. columbianus (4, 6, 8)
S. lateralis (5, 8)
S. l. tescorum (1, 3, 6)
S. parryii (8)
S. p. plesius (8)
S. richardsonii (7)
S. r. richardsonii (6)
S. saturatus (6, 8)
S. tridecemlineatus (6)
Spermophilus spp. (4, 8)
Thomomys talpoides andersoni (6)
Thomomys spp. (8)

Dist.: Alta, BC, YT

Records: 1. Rothschild 1905 (Alta, BC); 2. Wagner 1936a (BC); 3. Brown 1944 (Alta); 4. Holland 1944 (Alta, BC); 5. Jellison 1945 (Alta, BC); 6. Holland 1949 (Alta, BC); 7. Hilton and Mahrt 1971 (Alta); 8. Holland 1984 (Alta, BC, YT)

Oropsylla rupestris (Jordan, 1929)

Hosts: *Canis* spp. (1)
Cynomys l. ludovicianus (7)
Lepus townsendii campanius (7)
Mustela frenata longicauda (1, 4, 7)
Mustela spp. (2, 6)
Peromyscus spp. (9)
Rattus norvegicus (5, 9)
Spermophilus franklinii (7)
S. parryii (9)
S. richardsonii (1, 2, 4, 6, 7, 8, 9)
S. r. richardsonii (3, 5, 9)
Spermophilus spp. (5)
Taxidea taxus (4)
Thomomys spp. (1, 2, 4)
Weasel (9)

Dist.: Alta, Man, Sask, YT

Records: 1. Jordan 1929 (Alta); 2. Wagner 1936a (Alta); 3. Gibbons and Humphreys 1941 (Alta); 4. Brown 1944 (Alta); 5. Holland 1944 (Sask); 6. Jellison 1945 (Alta, Sask); 7. Holland 1949 (Alta, Man, Sask); 8. Hilton and Mahrt 1971 (Alta); 9. Holland 1984 (Alta, Man, Sask, YT)

Remarks: Holland (1984) recorded both *Spermophilus parryii* and *S. undulatus*.

Tarsopsylla octodecimdentata coloradensis (Baker, 1895)

Syn.: *Ceratophyllus coloradensis* Baker, 1904
Pulex coloradensis Baker, 1895
Tarsopsylla coloradensis Jordan, 1933

Hosts: *Glaucomys sabrinus* (2, 5)
G. s. alpinus (1)
Lynx rufus (5)
Martes americana (2, 5)
M. a. americana (4)
Tamiasciurus hudsonicus (2, 3, 5)
Tamiasciurus spp. (5)
Squirrel (5)

Dist.: Alta, BC, Man, NWT, Ont, Sask, YT

Records: 1. Holland 1941a (BC), 2. 1949 (Alta, BC, NWT); 3. Mahrt and Chai 1972 (Alta); 4. Holland 1979 (Ont), 5. 1984 (Alta, BC, Man, NWT, Ont, Sask, YT)

Thrassis acamantis (Rothschild, 1905)

Syn.: *Ceratophyllus acamantis* Rothschild, 1905

Syn.: *Oropsylla acamantis*

Hosts: *Canis latrans* (1)
Eutamias spp. (5)
Marmota flaviventris (2, 8)
M. f. avara (1, 3, 4, 5, 6, 7, 8)
M. vancouverensis (3)
Marmota spp. (5, 8)
Mephitis mephitis (1)
Mustela vison energumenos (1)
Peromyscus spp. (8)
Spermophilus c. columbianus (3)
Synaptomys spp. (8)
Tamiasciurus hudsonicus streatori (5)

Chipmunk (8)
Groundhog (8)
Skunk (8)
Weasel (8)
Dist.: Alta, BC
Record: 1. Rothschild 1905 (BC); 2. Wagner 1936a (BC); 3. Spencer 1936 (BC); 4. Holland 1938 (BC); 5. Brown 1944 (Alta); 6. Holland 1944 (BC), 7. 1949 (BC), 8. 1984 (Alta, BC)

Remarks: Rothschild's (1905) specimens of *T. acamantis* from *Canis latrans* and *Mustela vison ergumenos* may possibly be *Thrassis spenceri spenceri* (Holland 1984).

Thrassis bacchi bacchi (Rothschild, 1905)
Syn.: *Ceratophyllus bacchi* Rothschild, 1905
Oropsylla bacchi
Thrassis gladiolis gladiolis (Jordan)
Hosts: *Cynomys ludovicianus* (5)
C. l. ludovicianus (4)
Mustela frenata longicauda (4)
Spermophilus franklinii (3, 5)
S. richardsonii (5)
S. r. richardsonii (3, 4)
S. tridecemlineatus (1, 2, 4, 5)
S. t. tridecemlineatus (3)
Weasel (5)
Dist.: Alta, Man, Sask
Records: 1. Rothschild 1905 (Alta); 2. Brown 1944 (Alta); 3. Holland 1944 (Alta, Sask); 4. 1949 (Alta, Man, Sask), 5. 1984 (Alta, Man, Sask)

Thrassis petiolatus (Baker, 1904)
Syn.: *Ceratophyllus petiolatus* Baker, 1904
Hosts: *Eutamias* spp. (5)
Microtus pennsylvanicus (5)
Spermophilus columbianus (2, 4, 5)
S. c. columbianus (3)
S. lateralis (5)
S. richardsonii (5)
Spermophilus spp. (5)
Thomomys spp. (1)
Dist.: Alta, BC
Records: 1. Jordan 1929 (BC); 2. Brown 1944 (Alta); 3. Holland 1944 (BC), 4. 1949 (Alta, BC), 5. 1984 (Alta, BC)

Thrassis spenceri spenceri Wagner, 1936
Syn.: *Diamanus montanus* Holland, 1941
Thrassis acamantis Spencer, 1936
Thrassis spenceri vancouverensis Stark, 1957
Hosts: *Gulo luscus* (3)
Marmota caligata (4, 6)
M. c. cascadensis (4)
M. c. okanagana (2, 4, 6)
M. monax (6)
M. m. petrensis (4)
M. vancouverensis (4, 5, 6)
Marmota spp. (1, 4, 6)
Dist.: Alta, BC
Records: 1. Spencer 1936a (BC); 2. Wagner 1936a (BC); 3. Holland 1941a (BC), 4. 1949 (Alta, BC); 5. Stark 1957 (BC); 6. Holland 1984 (Alta, BC)

Family HYSTRICHOPSYLLIDAE

Anomiopsyllus montanus Collins, 1936
Host: *Neotoma cinerea*
Dist.: Alta
Records: Holland 1952, 1984

Atyphloceras bishopi Jordan, 1933
Syn.: *Saphiopsylla bishopi* (Jordan, 1933)
Hosts: *Blarina brevicauda* (3)
B. b. talpoides (2)
Clethrionomys gapperi (6)
C. g. loringi (5)
C. g. proteus (4, 6)
Clethrionomys spp. (6)
Microtus chrotorrhinus (6)
M. pennsylvanicus (4, 6)
M. p. pennsylvanicus (1, 2)
Microtus spp. (6)
Peromyscus maniculatus gracilis (1)
Dist.: Man, Nfld, Ont, Que
Records: 1. Baker 1946 (Que); 2. Holland 1949 (Ont); 3. Jameson 1950 (Ont); 4. Hopkins and Rothschild 1962 (Nfld, Ont, Que); 5. Buckner and Blasko 1969 (Man); 6. Holland 1984 (Man, Nfld, Ont, Que)

Atyphloceras multidentatus multidentatus (Fox, 1909)
Syn.: *Atyphloceras artius* Jordan, 1933
Hosts: *Microtus oregoni serpens* (2, 3)
M. townsendii tetramerus (3)
Peromyscus maniculatus (2)
P. m. austerus (2)
Peromyscus spp. (1, 3)
Rattus norvegicus (2)
Spilogale putorius gracilis (2)
Tamiasciurus hudsonicus streatori (2)
Tamiasciurus spp. (3)
Dist.: BC
Records: 1. Jordan 1933; 2. Holland 1949, 3. 1984

Callistopsyllus terinus campestris Holland, 1949
Syn.: *Callistopsyllus campestris* Holland, 1949
Hosts: *Peromyscus maniculatus nebrascensis* (1)
Peromyscus spp. (2, 3)
Dist.: Alta, Sask
Records: 1. Holland 1949 (Alta, Sask); 2. Hopkins and Rothschild 1962 (Alta); 3. Holland 1984 (Alta)

Callistopsyllus terinus terinus (Rothschild, 1905)
Syn.: *Ceratophyllus terinus* Rothschild, 1905
Hosts: *Peromyscus maniculatus* (3, 4, 5, 6)
P. m. artemisiae (5)
Peromyscus spp. (7)

Spermophilus columbianus (1, 2, 7)
Dist.: BC
Records: 1. Rothschild 1905; 2. Wagner 1936a, 3. 1940; 4. Holland 1941a; 5. Holland 1949; 6. Hopkins and Rothschild 1962; 7. Holland 1984

Catallagia borealis Ewing, 1929
Hosts: *Blarina brevicauda* (1, 2)
Clethrionomys gapperi (7, 10)
C. g. loringi (8, 10)
C. g. ochraceus (4, 10)
C. g. proteus (3, 5)
Microtus chrotorrhinus (9)
M. pennsylvanicus (5, 10)
Peromyscus maniculatus (6)
P. m. abietorum (4)
P. m. bairdii (10)
Dist.: Alta, Man, NB, Ont, Que
Records: 1. Brown 1944 (Alta); 2. Jameson 1950 (Ont); 3. Holland 1952a (Que); 4. Brown 1955 (NB); 5. Hopkins and Rothschild 1962 (Ont, Que); 6. Buckner 1964 (Man); 7. Brown 1968 (NB); 8. Buckner and Blasko 1969 (Man); 9. Whitaker and French 1982 (NB); 10. Holland 1984 (Man, NB, Ont, Que)

Catallagia charlottensis (Baker, 1898)
Syn.: *Ceratophyllus charlottensis* (Baker, 1904)
Pulex charlottensis Baker, 1898
Typhlopsylla charlottensis Baker, 1898
Hosts: *Clethrionomys gapperi* (5, 7)
C. g. cascadensis (7)
C. g. caurinus (7)
C. g. saturatus (4)
Clethrionomys spp. (7)
Eutamias spp. (7)
Microtus longicaudus macrurus (5)
M. oregoni serpens (5, 7)
M. townsendii tetramerus (7)
M. t. townsendii (5)
Microtus spp. (5, 7)
Neotoma cinerea (2, 4)
Neurotrichus g. gibbsii (5)
Peromyscus leucopus (2, 4)
P. maniculatus (5, 7)
P. m. austerus (5, 7)
P. m. borealis (2, 5)
P. m. interdictus (5)
P. m. keeni (1)
P. m. macrorhinus (3)
P. m. oreas (5)
Peromyscus spp. (2, 7)
Rattus norvegicus (5, 6)
Scapanus orarius schefferi (5)
Scapanus spp. (5)
Sciurus spp. (7)
Spermophilus columbianus (3)
Synaptomys spp. (5, 7)
Tamiasciurus hudsonicus (7)
Dist.: Alta, BC
Records: 1. Baker 1898 (BC); 2. Rothschild 1905 (Alta, BC); 3. Wagner 1936a (BC); 4. Brown 1944 (Alta); 5. Holland 1949 (BC); 6. Hopkins and Rothschild 1962 (BC); 7. Holland 1984 (BC)

Remarks: Rev. J.H. Keen collected the specimens from a mouse nest (Baker 1898). The host was probably *P. m. keeni* (Holland 1984).

Catallagia dacenkoi fulleri Holland, 1951
Hosts: *Clethrionomys gapperi* (1, 4)
C. g. athabascae (1, 2, 4)
C. rutilus (3, 4)
C. r. dawsoni (1, 4)
Clethrionomys spp. (4)
Lemmus sibiricus trimucronatus (4)
Microtus longicaudus vellerosus (4)
M. oeconomus (4)
M. pennsylvanicus (2, 4)
M. p. drummondii (1, 2, 4)
Microtus spp. (1, 2, 4)
Peromyscus spp. (4)
Dist.: Alta, BC, Man, NWT, YT
Records: 1. Holland 1951 (BC, Man, NWT); 2. Hopkins and Rothschild 1962 (NWT, YT); 3. Mitchell and Behin 1965 (NWT); 4. Holland 1984 (Alta, BC, Man, YT)

Catallagia decipiens Rothschild, 1915
Hosts: *Clethrionomys gapperi* (5)
C. g. loringi (1)
C. g. saturatus (3, 4)
C. rutilus dawsoni (5)
Clethrionomys spp. (5)
Eutamias amoenus affinis (4, 5)
Eutamias spp. (5)
Lagurus curtatus (5)
Lepus spp. (5)
Microtus longicaudus (4, 5)
M. l. mordax (4)
M. montanus canescens (4, 5)
M. pennsylvanicus (5)
M. p. drummondii (4)
Microtus spp. (5)
Mustela erminea (5)
M. frenata (4)
Neotoma cinerea (1, 5)
Neotoma spp. (5)
Ochotona princeps (4)
Ochotona spp. (5)
Onychomys leucogaster missouriensis (4)
Peromyscus maniculatus (4, 5)
P. m. alpinus (5)
P. m. artemisiae (4, 5)
P. m. borealis (4, 5)
P. m. nebrascensis (4)
Peromyscus spp. (1, 5)
Phenacomys intermedius (4, 5)
Sorex spp. (4, 5)
Spermophilus columbianus (2, 3, 4, 5)
S. richardsonii (4, 5)
Tamiasciurus hudsonicus (4, 5)
Thomomys talpoides fuscus (5)

T. t. incensus (4)
Zapus hudsonicus (5)
Z. princeps idahoensis (4)
Zapus spp. (5)
Gopher (5)
Vole (5)
Dist.: Alta, BC, Man, Sask, YT
Records: 1. Rothschild 1915 (Alta, BC); 2. Wagner 1936 (BC); 3. Brown 1944 (Alta); 4. Holland 1949 (Alta, BC, Sask), 5. 1984 (Alta, BC, Man, Sask, YT)

Catallagia jellisoni Holland, 1954
Hosts: *Clethrionomys gapperi* (1, 2, 3)
C. rutilus dawsoni (3)
Microtus pennsylvanicus (3)
M. p. drummondii (2)
Neotoma cinerea (2, 3)
Peromyscus maniculatus (3)
Dist.: Alta, BC, YT
Records: 1. Holland 1954 (Alta); 2. Hopkins and Rothschild 1962 (Alta, BC); 3. Holland 1984 (Alta, BC, YT)

Remarks: The host was either *C. r. dawsoni* or *Lemmus sibiricus* (Holland 1984).

Catallagia mathesoni Jameson, 1950
Host: *Peromyscus maniculatus*
Dist.: BC
Records: 1. Holland 1952a, 2. 1984

Catallagia sculleni chamberlini Hubbard, 1940
Hosts: *Clethrionomys* spp.
Microtus richardsoni
Microtus spp.
Peromyscus spp.
Dist.: BC
Record: Holland 1984

Catallagia sculleni sculleni Hubbard, 1940
Syn.: *Catallagia chamberlini* Hubbard, 1940
Hosts: *Peromyscus maniculatus* (1)
P. m. austerus (2)
Peromyscus spp. (2)
Scapanus orarius schefferi (1, 2)
Dist.: BC
Records: 1. Holland 1949, 2. 1984

Catallagia spp.
Host: *Peromyscus maniculatus*
Dist.: Man
Record: Buckner 1964

Conorhinopsylla stanfordi Stewart, 1930
Hosts: *Glaucomys sabrinus* (2, 4)
G. volans (3)
G. v. volans (1, 4)
Sciurus carolinensis (4)
Tamiasciurus spp. (4)
Dist.: Ont
Records: 1. Holland 1949; 2. Hopkins and Rothschild 1962; 3. Tipton et al. 1979; 4. Holland 1984

Corrodopsylla curvata curvata (Rothschild, 1915)
Syn.: *Doratopsylla curvata* Rothschild, 1915
Hosts: *Blarina brevicauda* (5, 10, 13, 14)
B. b. angusta (12)
B. b. manitobensis (11)
B. b. talpoides (4)
Blarina spp. (14)
Clethrionomys gapperi (10, 14)
C. rutilus (14)
C. r. dawsoni (14)
Clethrionomys spp. (14)
Microsorex hoyi (10, 14)
Microsorex spp. (14)
Microtus oeconomus (14)
M. pennsylvanicus (14)
Microtus spp. (14)
Mustela erminea (14)
Peromyscus maniculatus (10)
Peromyscus spp. (14)
Sorex arcticus laricorum (11, 14)
S. cinereus (9, 13, 14)
S. c. acadicus (6)
S. c. cinereus (14)
S. c. haydeni (4)
S. c. miscix (8)
S. fumeus (13, 14)
S. palustris (9, 13, 14)
S. vagrans (4)
S. v. obscurus (14)
Sorex spp. (1, 2, 3, 4, 7, 14)
Zapus hudsonicus (3, 13, 14)
Zapus spp. (1)
Dist.: Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT
Records: 1. Rothschild 1915 (Alta); 2. Wagner 1936 (BC); 3. Brown 1944 (Alta); 4. Holland 1949 (BC, Ont, Sask); 5. Hubbard 1949 (Ont); 6. Brown 1955 (NS); 7. Gabbutt 1961 (Nfld); 8. Harper 1961 (Que); 9. Scholten et al. 1962 (Ont); 10. Robert 1962 (Que); 11. Buckner 1964 (Man); 12. Brown 1968 (NB); 13. Wright 1979 (NS); 14. Holland 1984 (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Remarks: Holland (1949) recorded *Sorex obscurus obscurus* as the host for *C. c. curvata*. There is some doubt about the validity of *S. o. obscurus* so we recorded it as *Sorex vagrans*.

Corrodopsylla curvata obtusata (Wagner, 1929)
Syn.: *Doratopsylla curvata obtusata* Wagner, 1929
Hosts: *Microtus oregoni serpens* (3)
Neurotrichus g. gibbsii (3)
Sorex palustris (6)
S. vagrans vancouverensis (4)
Sorex spp. (1, 2, 3, 4, 5, 6)
Dist.: BC
Records: 1. Wagner 1929, 2. 1936a; 3. Holland 1942, 4. 1949; 5. Hopkins and Rothschild 1966; 6. Holland 1984

Corrodopsylla hamiltoni (Traub, 1944)
Syn.: *Doratopsylla hamiltoni* Traub, 1944
Host: *Sorex cinereus*
Dist.: NB
Record: Whitaker and French 1982

Corypsylla jordani Hubbard, 1940
Hosts: *Neurotrichus g. gibbsii* (1, 2, 3)
Neurotrichus spp. (3)
Dist.: BC
Records: 1. Holland 1949; 2. Hopkins and Rothschild 1962; 3. Holland 1984

Corypsylla kohlsi Hubbard, 1940
Syn.: *Corypsylloides kohlsi* (Hubbard, 1940)
Hosts: *Sorex vagrans* (2)
S. v. obscurus (1)
S. o. setosus (2)
Sorex spp. (2)
Dist.: BC
Records: 1. Holland 1949, 2. 1984

Corypsylla ornata Fox, 1908
Hosts: *Microtus oregoni serpens* (3, 5)
M. t. townsendii (3)
Neurotrichus spp. (4, 5)
Scapanus orarius schefferi (1, 2, 3, 5)
S. townsendii (3)
Scapanus spp. (4, 5)
Mole (5)
Dist.: BC
Records: 1. Wagner 1940; 2. Holland 1941a, 3. 1949; 4. Hopkins and Rothschild 1962; 5. Holland 1984

Ctenophthalmus pseudagyrtes pseudagyrtes Baker, 1895
Hosts: *Blarina brevicauda* (6, 7, 10, 13, 14, 15, 16)
B. b. angustus (13)
B. b. pallida (9)
B. b. talpoides (2, 5, 16)
Blarina spp. (16)
Clethrionomys gapperi (5, 10, 13, 14, 16)
C. g. gaspeanus (13)
C. g. loringi (1, 12, 16)
C. g. ochraceus (9)
C. g. saturatus (3)
Clethrionomys spp. (16)
Condylura cristata (13, 14, 15, 16)
C. c. cristata (5)
C. c. nigra (4)
Eutamias minimus (5, 6, 16)
E. m. borealis (12, 16)
Eutamias spp. (5, 16)
Glaucomys volans (12, 16)
Microtus chrotorrhinus (13, 15)
M. ochrogaster (16)
M. o. minor (12, 16)
M. pennsylvanicus (6, 10, 13, 14, 16)
M. p. drummondii (1, 3, 5, 12)
M. p. pennsylvanicus (2, 4, 8)
Microtus spp. (16)
Mustela spp. (16)
Napaeozapus insignis (14)
Napaeozapus spp. (16)
Parascalops breweri (2, 5, 12, 16)
Parascalops spp. (16)
Peromyscus leucopus (14)
P. l. noveboracensis (5)
P. maniculatus (6, 10, 15)
P. m. abietorum (9)
P. m. anticostiensis (16)
P. m. bairdii (11, 16)
P. m. borealis (5)
Peromyscus spp. (5, 16)
Pitymys pinetorum scalapoides (2)
Rattus norvegicus (10, 13)
Scalopus aquaticus (16)
Sorex cinereus (5, 16)
S. fumeus (15, 16)
Spermophilus r. richardsonii (5)
Synaptomys borealis (15)
S. cooperi (15)
Tamiasciurus hudsonicus (5, 13, 16)
T. h. gymnicus (4, 9, 13)
Tamiasciurus spp. (16)
Tamias striatus (10, 11, 14, 16)
T. s. griseus (16)
Zapus spp. (10)
Mouse (9)
Dist.: Alta, Man, NB, NS, Ont, PEI, Que, Sask
Records: 1. Rothschild 1904 (Alta); 2. Jameson 1943 (Ont); 3. Brown 1944 (Alta); 4. Baker 1946 (Que); 5. Holland 1949 (Alta, Man, Ont, Sask); 6. Hubbard 1949a (Ont); 7. Jameson 1950 (Ont); 8. Judd 1950 (Ont); 9. Brown 1955 (NB, NS, Ont); 10. Robert 1962 (Que); 11. Buckner 1964 (Man); 12. Hopkins and Rothschild 1966 (Alta, Man, Ont); 13. Brown 1968 (NB); 14. Wright 1979 (NS); 15. Whitaker and French 1982 (NB); 16. Holland 1984 (Alta, Man, NB, NS, Ont, PEI, Que, Sask)

Delotelis hollandi Smit, 1952
Hosts: *Clethrionomys gapperi* (1, 2, 3)
Clethrionomys spp. (3)
Microtus longicaudus (1, 2, 3)
M. montanus canescens (2, 3)
M. oregoni serpens (1, 2, 3)
M. townsendii (3)
M. t. townsendii (1, 2)
Peromyscus maniculatus (1, 2)
P. m. austerus (1, 2, 3)
P. m. oreas (2, 3)
Peromyscus spp. (3)
Dist.: Alta, BC
Records: 1. Holland 1949 (BC); 2. Smit 1952 (BC); 3. Holland 1984 (Alta, BC)

Delotelis telegoni (Rothschild, 1905)
Syn.: *Ceratophyllus telegoni* Rothschild, 1905
Hosts: *Clethrionomys gapperi* (4)
C. g. saturatus (1, 2)

Microtus longicaudus (3, 4)
M. pennsylvanicus drummondii (1, 2)
Microtus spp. (4)
Dist.: Alta, BC
Records: 1. Rothschild 1905 (Alta, BC); 2. Brown 1944 (Alta); 3. Holland 1949 (BC), 4. 1984 (Alta, BC)

Doratopsylla blarinae Fox, 1914
Hosts: *Blarina brevicauda* (2, 3, 4, 5, 7, 8, 9)
B. b. manitobensis (6)
B. b. talpoides (1, 9)
Blarina spp. (9)
Parascalops breweri (2)
Peromyscus spp. (2, 9)
Sorex spp. (2)
Dist.: BC, Man, NB, NS, Ont, Que
Records: 1. Jameson 1943 (Ont), 2. Holland 1949 (Ont); 3. Jameson 1950 (Ont); 4. Robert 1962 (Que); 5. Hopkins and Rothschild 1966 (BC); 6. Buckner and Blasko 1969 (Man); 7. Wright 1979 (NS); 8. Whitaker and French 1982 (NB); 9. Holland 1984 (NB, NS, Ont, Que)

Epitedia faceta (Rothschild, 1915)
Syn.: *Neopsylla faceta* Rothschild, 1915
Hosts: *Glaucomys sabrinus*
G. volans
G. v. volans
Glaucomys spp.
Dist.: Ont, Que
Record: Holland 1984

Epitedia scapani (Wagner, 1936)
Syn.: *Neopsylla scapani* Wagner, 1936
Hosts: *Aplodontia r. rufa* (5)
Microtus oregoni serpens (5, 6, 7)
M. t. townsendii (7)
Mustela spp. (3)
Neurotrichus gibbsii (7)
N. g. gibbsii (4, 7)
Neurotrichus spp. (7)
Peromyscus maniculatus (7)
P. m. austerus (3, 4, 7)
P. m. oreas (4)
Peromyscus spp. (5, 7)
Rattus norvegicus (5)
Scapanus orarius (1)
S. o. orarius (7)
S. o. schefferi (2, 3, 4, 7)
S. townsendii (3)
Sorex t. trowbridgii (5)
Sorex spp. (3, 4, 7)
Zapus spp. (7)
Mole (7)
Weasel (7)
Dist.: BC
Records: 1. Wagner 1936, 2. 1940; 3. Holland 1941, 4. 1942, 5. 1949; 6. Hopkins and Rothschild 1962; 7. Holland 1984

Epitedia stewarti Hubbard, 1940
Host: *Peromyscus* spp.
Dist.: BC
Record: Holland 1984

Epitedia wenmanni wenmanni (Rothschild, 1904)
Syn.: *Ctenophthalmus wenmanni* Rothschild, 1904
Hosts: *Blarina brevicauda* (7, 8, 20)
Blarina spp. (20)
Clethrionomys gapperi (5, 13, 16, 20)
C. g. athabascae (20)
C. g. loringi (20)
C. g. ochraceus (8)
C. g. proteus (12, 20)
C. g. ungava (11, 20)
C. rutilus (20)
C. r. dawsoni (10, 20)
Condylura cristata (4, 18, 20)
Eutamias spp. (5)
Glaucomys sabrinus (16)
G. s. macrotis (16)
Martes americana (20)
Microtus chrotorrhinus (19, 20)
M. longicaudus (20)
M. montanus canescens (20)
M. ochrogaster minor (12, 20)
M. pennsylvanicus (18)
M. p. drummondii (5, 20)
M. p. enixus (11)
M. p. pennsylvanicus (4, 5)
Microtus spp. (5, 20)
Mus musculus (5)
Mustela erminea (5, 12, 20)
M. e. cicognani (12, 20)
M. e. invicta (20)
M. e. richardsonii (20)
M. frenata (12, 20)
M. f. longicauda (12)
Mustela spp. (12, 20)
Mustelidae gen. spp. (20)
Neotoma cinerea (1, 20)
Neotoma spp. (20)
Onychomys leucogaster (12, 20)
Peromyscus leucopus (3, 18)
P. maniculatus (1, 5, 13, 14, 20)
P. m. abietorum (9, 16)
P. m. algidus (20)
P. m. artemisiae (5, 12, 20)
P. m. bairdii (15, 20)
P. m. borealis (5, 12, 20)
P. m. gracilis (4, 5)
P. m. nebrascensis (5)
Peromyscus spp. (20)
Phenacomys intermedius celatus (11, 20)
Phenacomys spp. (20)
Sorex cinereus (20)
S. c. cinereus (17)
S. fumeus (19)
Spermophilus richardsonii (20)
S. r. richardsonii (5)
Sylvilagus floridanus (20)
Synaptomys borealis (19)
S. cooperi (19)

Tamiasciurus hudsonicus (5, 20)
T. h. gymnicus (9, 16)
T. h. streatori (5)
Tamiasciurus spp. (20)
Tamias striatus lysteri (2)
Vulpes vulpes (8)
Zapus princeps minor (5)

Dist.: Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT

Records: 1. Rothschild 1904 (BC); 2. Jameson 1943 (Ont); 3. Brown 1944 (Alta); 4. Baker 1946 (Que); 5. Holland 1949 (Alta, BC, Man, NB, NWT, Ont, Sask); 6. Hubbard 1949a (Ont); 7. Jameson 1950 (Ont); 8. Judd 1953 (Ont); 9. Brown 1955 (NB); 10. Judd 1955 (NWT); 11. Gabbutt 1961 (Nfld); 12. Hopkins and Rothschild 1962 (Alta, BC, Man, NB, Que); 13. Robert 1962 (Que); 14. Scholten et al. 1962 (Ont); 15. Buckner 1964 (Man); 16. Brown 1968 (NB); 17. Buckner and Blasko 1969 (Man); 18. Wright 1979 (NS); 19. Whitaker and French 1982 (NB); 20. Holland 1984 (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Remarks: Holland (1949) recorded *Putorius longicaudatus* and *Putorius* spp. as the hosts. We recorded it under Mustelidae gen. spp. because the validity of the host classification was uncertain.

Hystrichopsylla dippiei ssp. Wilson and Johnson, 1971

Hosts: *Martes a. americana* (2)
Tamiasciurus hudsonicus (3)
Ground squirrels (1)

Dist.: Alta, NB, Ont

Records: 1. Gibbons and Humphreys 1941 (Alta); 2. Holland 1979 (Ont), 3. 1984 (NB, Ont)

Hystrichopsylla dippiei dippiei Rothschild, 1902

Hosts: *Clethrionomys gapperi* (8)
C. g. loringi (7, 8)
Eutamias amoenus affinis (2)
Lepus spp. (3)
M. ochrogaster minor (6, 8)
M. pennsylvanicus (5, 8)
Microtus spp. (8)
Mustela frenata longicauda (1, 6)
M. vison energumenos (1)
Peromyscus maniculatus (5, 8)
P. m. bairdii (7, 8)
P. m. nebrascensis (4)
Peromyscus sp. (2)
Sorex spp. (2)
Spermophilus franklinii (6)
S. richardsonii (5, 6)
S. r. richardsonii (4)
Spilogale putorius gracilis (2)
Thomomys talpoides (3)
Zapus princeps (5)
Z. p. minor (4)

Dist.: Alta, BC, Man, Ont, Sask

Records: 1. Rothschild 1902 (Alta, BC); 2. Wagner 1936a (BC); 3. Brown 1944 (Alta); 4. Holland 1949 (Alta, Sask), 5. 1957 (Alta, Sask); 6. Hopkins and Rothschild 1962 (Alta, Man, Ont); 7. Buckner 1964 (Man); 8. Holland 1984 (Alta, BC, Man)

Remarks: Wagner (1936a) reported the mouse host as *Peromyscus eusterugus*. We could not determine the validity of this species, and so recorded it as *Peromyscus* sp.

Hystrichopsylla dippiei spinata Holland, 1947

Syn.: *Hystrichopsylla spinata* Holland, 1949

Hosts: *Peromyscus maniculatus* (1, 3)
Spermophilus columbianus (1, 3)
Spilogale putorius gracilis (1, 2)

Dist.: BC

Records: 1. Holland 1947, 2. 1949; 3. Hopkins and Rothschild 1962

Remarks: Holland (1947, 1949) used *Spilogale gracilis olympica* instead of *S. putorius gracilis*.

Hystrichopsylla dippiei truncata Holland, 1957

Hosts: *Clethrionomys gapperi* (1)
C. g. saturatus (3)
Microtus longicaudus (1)
M. montanus canescens (1, 3)
M. pennsylvanicus (1)
M. p. drummondii (3)
Mustela erminea (1)
Peromyscus maniculatus (1)
P. m. artemisiae (3)
Peromyscus spp. (3)
Sorex spp. (1, 3)
Spermophilus columbianus (1, 2, 3)
Tamiasciurus hudsonicus (1)

Dist.: BC

Records: 1. Holland 1957; 2. Hopkins and Rothschild 1962; 3. Holland 1984

Hystrichopsylla occidentalis occidentalis Holland, 1949

Syn.: *Hystrichopsylla gigas dippiei* Rothschild, 1902

Hosts: *Clethrionomys gapperi* (2, 3)
C. g. caurinus (1)
C. rutilus dawsoni (2)
Clethrionomys spp. (3)
Microtus longicaudus (2)
M. l. macrurus (3)
M. oeconomus (2)
M. oregoni serpens (2, 3, 4)
M. townsendii (2)
Microtus spp. (2)
Neurotrichus gibbsii (2)
Peromyscus maniculatus (2)
P. m. alpinus (3)
P. m. austerus (4)
Peromyscus spp. (3, 4)
Phenacomys intermedius (2)
Rattus norvegicus (2)
R. rattus (2)
Scapanus orarius schefferi (2)
Scapanus spp. (4)
Sorex vagrans obscurus (2)
S. trowbridgii (2)

Sorex spp. (2)
Tamiasciurus douglasii (2)
Zapus trinotatus trinotatus (4)
Dist.: Alta, BC
Records: 1. Holland 1949 (BC), 2. 1957 (BC); 3. Campos and Stark 1979 (Alta, BC); 4. Holland 1984 (BC)

Hystrichopsylla schefferi Chapin, 1919
Hosts: *Mustela vison energumenos*
Spilogale putorius gracilis
Dist.: BC
Record: Holland 1949

Hystrichopsylla tahavuana Jordan, 1929
Hosts: *Blarina brevicauda* (3, 4)
B. b. talpoides (1)
Microtus pinetorum scalapsoides (2)
Microtus spp. (5)
Parascalops breweri (2)
Dist.: NB, Ont, Que
Records: 1. Jameson 1943 (Ont); 2. Holland 1949 (Ont); 3. Jameson 1950 (Ont); 4. Whitaker and French 1982 (NB); 5. Holland 1984 (Que)

Megarthroglossus divisus divisus (Baker, 1895)
Syn.: *Megarthroglossus longispinus* (Baker, 1895)
Pulex longispinus Baker, 1895
Hosts: *Microtus longicaudus* (3)
Mus spp. (1)
Neotoma cinerea (5)
N. c. drummondii (3, 4, 5)
Neotoma spp. (5)
Tamiasciurus hudsonicus (5)
T. h. richardsoni (1)
Dist.: Alta, BC
Records: 1. Jordan and Rothschild 1915 (Alta); 2. Wagner 1936a (BC); 3. Holland 1949 (BC); 4. Hopkins and Rothschild 1962 (Alta); 5. Holland 1984 (Alta)

Megarthroglossus divisus exsecatus Wagner, 1936
Hosts: *Glaucomys sabrinus* (4, 6)
G. s. fuliginosus (3)
Mustela spp. (5, 6)
Neotoma cinerea (4, 6)
Peromyscus maniculatus (3)
Sciurus spp. (6)
Tamiasciurus hudsonicus (3, 5)
T. h. columbiensis (3)
T. h. streatori (1, 2, 3)
Tamiasciurus spp. (4, 6)
Weasel (3)
Dist.: BC
Records: 1. Wagner 1936; 2. Holland 1941a, 3. 1949; 4. Mendez 1956; 5. Hopkins and Rothschild 1962; 6. Holland 1984

Megarthroglossus procus procus Jordan and Rothschild, 1915
Syn.: *Megarthroglossus similis* Wagner, 1936
Hosts: *Glaucomys* spp. (6)
Neotoma cinerea occidentalis (2)
Peromyscus maniculatus (5)
Peromyscus spp. (2, 6)
Rattus norvegicus (3)
Spilogale putorius gracilis (1)
Spilogale spp. (2)
Tamiasciurus douglasii (4, 6)
T. d. mollipilosus (3)
Squirrel (6)
Dist.: BC
Records: 1. Jordan and Rothschild 1915; 2. Wagner 1936a; 3. Holland 1949; 4. Mendez 1956; 5. Hopkins and Rothschild 1962; 6. Holland 1984

Megarthroglossus sicamus Jordan and Rothschild, 1915
Hosts: *Canis latrans* (1)
Lynx spp. (3)
Neotoma cinerea occidentalis (2)
Neotoma spp. (4)
Dist.: BC
Records: 1. Jordan and Rothschild 1915; 2. Wagner 1936a; 3. Holland 1949, 4. 1984

Megarthroglossus spenceri Wagner, 1936
Syn.: *Megarthroglossus pygmaeus* Wagner, 1936
Hosts: *Neotoma cinerea* (1, 2)
Ochotona princeps (1)
Dist.: BC
Records: 1. Wagner 1936a; 2. Tipton et al. 1979

Meringis parkeri Jordan, 1937
Host: *Dipodomys ordii terrosus*
Dist.: Sask
Record: Holland 1984

Meringis shannoni (Jordan, 1929)
Hosts: *Perognathus parvus laingi* (2)
P. p. lordi (1, 2)
Peromyscus maniculatus artemisiae (1)
Dist.: BC
Records: 1. Holland 1941a, 2. 1949

Nearctopsylla brooksi (Rothschild, 1904)
Hosts: *Canis* spp. (3, 4)
Lynx spp. (3)
Martes americana (1, 2, 3, 4)
Martes a. abietinoides (4)
Mustela erminea (2, 4)
M. e. cicognanii (4)
M. e. invicta (1, 3, 4)
M. e. richardsonii (1, 2, 3, 4)
M. frenata (2, 4)
M. f. longicauda (1)
M. f. nevadensis (4)
M. f. oribasus (2, 4)
Mustela vison (2, 3, 4)
M. v. energumenos (4)
Mustela spp. (2, 3, 4)
Spermophilus richardsonii (3)
Marten (4)

Weasel (4)
Dist.: Alta, BC, YT
Records: 1. Rothschild 1904 (Alta, BC); 2. Holland 1949 (Alta, BC); 3. Hopkins and Rothschild 1962 (Alta, BC); 4. Holland 1984 (Alta, BC, YT)
Remarks: Holland (1984) reported three species: *Putorius cicognani* (= *Mustela erminea cicognanii*), *Putorius richardsonii* (= *M. e. richardsonii*) and *Mustela erminea richardsonii.*

Nearctopsylla genalis (Baker, 1904)
Host: *Blarina brevicauda* (1)
Dist.: Ont
Record: Jameson (1950)

Nearctopsylla genalis genalis (Baker, 1904)
Syn.: *Nearctopsylla hygini laurentina* Jordan and Rothschild, 1923
Hosts: *Blarina brevicauda* (5, 8)
Blarina spp. (8)
Clethrionomys gapperi (6)
Condylura cristata (7, 8)
Martes americana (8)
Mustela erminea (2, 8)
M. e. cicognanii (3, 8)
M. e. richardsonii (6)
M. frenata noveboracensis (5, 8)
Mustela spp. (1, 2)
Scalopus spp. (8)
Sorex arcticus (4)
S. cinereus (8)
S. c. miscix (5, 8)
S. fumeus (8)
Tamiasciurus hudsonicus gymnicus (6)
Weasel (8)
Dist.: NB, Nfld, Ont, Que
Records: 1. Jordan and Rothschild 1923 (NB); 2. Holland 1949 (NB, Ont); 3. Judd 1954a (Ont); 3. Brown 1955 (NB); 4. Hopkins and Rothschild 1962 (Nfld, Que); 5. Brown 1968 (NB); 6. Whitaker and French 1982 (NB); 7. Holland 1984 (NB, Nfld, Ont, Que)

Nearctopsylla genalis hygini (Rothschild, 1904)
Syn.: *Ctenopsyllus hygini* Rothschild, 1904
Hosts: *Blarina brevicauda* (5)
B. b. manitobensis (5)
Mustela erminea (2, 5)
M. e. arctica (5)
M. e. bangsi (3)
M. e. cicognanii (5)
M. e. invicta (1)
M. e. richardsonii (5)
Mustela sp. (3, 5)
Sorex arcticus (5)
S. a. arcticus (5)
Sorex spp. (2, 5)
Dist.: Alta, Man, Sask
Records: 1. Rothschild 1904 (Alta); 2. Holland 1949 (Alta, Man, Sask); 3. Hopkins and Rothschild 1962 (Alta, Man); 4. Buckner and Blasko 1969 (Man); 5. Holland 1984 (Alta, Man, Sask)
Remarks: Holland (1984) classified *Mustela e. richardsonii* and *M. e. arctica* as *Putorius richardsonii* and *M. arctica arctica* respectively.

Nearctopsylla grahami Holland, 1979
Host: *Martes a. americana* (1)
Dist.: Ont
Records: 1. Holland 1979, 2. 1984

Nearctopsylla hyrtaci (Rothschild, 1904)
Syn.: *Ctenopsyllus hyrtaci* Rothschild, 1904
Hosts: *Clethrionomys gapperi saturatus* (2)
Martes americana (2)
M. a. caurina (2)
Microtus spp. (4)
Mustela erminea (3)
M. e. cicognanii (4)
M. frenata (2, 4)
M. f. longicauda (3)
M. vison (2)
M. v. energumenos (1, 4)
Mustela spp. (2, 3, 4)
Sorex a. arcticus (3, 4)
S. cinereus (2)
S. vagrans (1, 4)
S. v. setosus (4)
S. palustris (4)
Sorex spp. (3, 4)
Weasel (4)
Dist.: Alta, BC
Records: 1. Rothschild 1904 (BC); 2. Holland 1949 (BC); 3. Hopkins and Rothschild 1962 (Alta, BC); 4. Holland 1984 (Alta, BC)

Nearctopsylla jordani Hubbard, 1940
Syn.: *Nearctopsylla hygini columbiana* Wagner, 1940
Hosts: *Neurotrichus gibbsii* (4, 5)
N. g. gibbsii (3, 5)
Neurotrichus spp. (5)
Scapanus orarius schefferi (1, 2, 5)
Scapanus spp. (5)
Dist.: BC
Records: 1. Wagner 1940; 2. Holland 1941a, 3. 1949; 4. Hopkins and Rothschild 1962; 5. Holland 1984

Nearctopsylla traubi Hubbard, 1940
Hosts: *Microtus oregoni serpens* (2, 4)
Neurotrichus g. gibbsii (1, 2, 4)
Scapanus orarius schefferi (2, 3, 4)
S. townsendii (2)
Dist.: BC
Records: 1. Holland 1949; 2. Smit 1952; 3. Hopkins and Rothschild 1962; 4. Holland 1984

Neopsylla inopina Rothschild, 1915
Syn.: *Epitedia inopina* (Rothschild, 1915)
Hosts: *Clethrionomys gapperi* (1, 8)
C. g. saturatus (4)
Mustela frenata longicauda (1, 4, 6)
Mustela spp. (6)
Peromyscus maniculatus nebrascensis (6)

Rattus norvegicus (8)
Spermophilus columbianus (6, 7)
S. c. columbianus (2, 5, 8)
S. franklinii (6)
S. richardsonii (1, 4, 5, 7, 8)
S. r. richardsonii (6, 7)
Ground squirrels (3)
Weasel (8)
Dist.: Alta, BC, Sask
Records: 1. Rothschild 1915 (Alta); 2. Holland 1940 (BC); 3. Gibbons and Humphreys 1941 (Alta); 4. Brown 1944 (Alta); 5. Holland 1944 (Alta, BC, Sask), 6. 1949 (Alta, BC, Sask); 7. Hilton and Mahrt 1971 (Alta); 8. Holland 1984 (Alta, BC, Sask)

Rhadinopsylla arborea Smit, 1957
Hosts: *Clethrionomys gapperi* (2)
Clethrionomys spp. (2)
Martes americana (2)
Microtus longicaudus (2)
Neotoma cinerea (2)
N. c. drummondii (2)
Tamiasciurus hudsonicus (2)
T. h. baileyi (1, 2)
Dist.: Alta, BC
Record: 1. Smit 1957 (Alta); 2. Holland 1984 (Alta, BC)

Rhadinopsylla difficilis Smit, 1957
Hosts: *Microtus montanus canescens* (3)
Mustela erminea (1, 2, 3)
Mustela spp. (1, 2, 3)
Neotoma spp. (3)
Ochotona princeps (3)
O. p. brooksi (3)
Peromyscus spp. (3)
Phenacomys spp. (3)
Spermophilus lateralis (3)
Dist.: BC
Records: 1. Smit 1957; 2. Hopkins and Rothschild 1962; 3. Holland 1984

Rhadinopsylla fraterna (Baker, 1895)
Syn.: *Rectofrontia fraterna* (Baker, 1895)
Hosts: *Clethrionomys gapperi* (8)
Lagurus curtatus (8)
Martes americana (3)
M. a. americana (7)
Microtus pennsylvanicus (8)
M. p. drummondii (5, 8)
Mustela frenata longicauda (3, 4, 5, 8)
Mustela spp. (5, 8)
Neotoma cinerea drummondii (3)
Ochotona princeps (3, 4)
Onychomys leucogaster missouriensis (3, 8)
Peromyscus maniculatus (8)
P. m. nebrascensis (3)
Phenacomys intermedius (3)
Spermophilus c. columbianus (1)
S. richardsonii (4, 5, 6, 8)
S. r. richardsonii (3)
Tamiasciurus hudsonicus (3)
Thomomys spp. (5, 8)
Ground squirrels (2)
Dist.: Alta, BC, Ont, Sask
Records: 1. Holland 1940c (BC); 2. Gibbons and Humphreys 1941 (Alta); 3. Holland 1949 (Alta, BC, Sask); 4. Smit 1957 (Alta); 5. Hopkins and Rothschild 1962 (Alta); 6. Hilton and Mahrt 1971 (Alta); 7. Holland 1979 (Ont), 8. 1984 (BC, Sask)

Rhadinopsylla linta Smit, 1957
Hosts: *Clethrionomys gapperi athabascae* (2)
C. rutilus dawsoni (1, 2)
Clethrionomys spp. (2)
Lemmus sibiricus (2)
Microtus spp. (2)
Neotoma cinerea occidentalis (1, 2)
Peromyscus maniculatus (2)
Spermophilus parryii (2)
Spermophilus spp. (2)
Tamiasciurus hudsonicus (2)
Dist.: BC, NWT, YT
Records: 1. Smit 1957 (BC); 2. Holland 1984 (BC, NWT, YT)

Rhadinopsylla media Smit, 1957
Hosts: *Clethrionomys gapperi* (2)
C. g. proteus (1, 2)
Mustela erminea (2)
Mustela spp. (2)
Dist.: Alta, Que
Records: 1. Smit 1957 (Que); 2. Hopkins and Rothschild 1962 (Alta, Que)

Rhadinopsylla rauschi Holland, 1979
Host: *Peromyscus maniculatus nebrascensis*
Dist.: Sask
Records: 1. Holland 1979, 2. 1984

Rhadinopsylla sectilis goodi (Hubbard, 1941)
Syn.: *Rectofrontia sectilis* Wagner, 1936
Hosts: *Microtus oregoni serpens* (2)
Peromyscus maniculatus (3)
P. m. austerus (1, 2, 3)
P. m. oreas (2, 3)
Peromyscus spp. (2, 3)
Rattus norvegicus (2, 3)
Spilogale putorius gracilis (2, 3)
Tamiasciurus douglasii mollipilosus (2)
Dist.: BC
Records: 1. Wagner 1936a; 2. Holland 1949, 3. 1984

Rhadinopsylla sectilis sectilis Jordan and Rothschild, 1923
Hosts: *Mus musculus* (2)
Mus spp. (1)
Peromyscus maniculatus (2)
P. m. artemisiae (1, 2, 3)
Peromyscus spp. (3)
Spermophilus c. columbianus (2)
Tamiasciurus hudsonicus (3)

T. h. streatori (2)
Dist.: BC
Records: 1. Jordan and Rothschild 1923; 2. Holland 1949, 3. 1984

Stenistomera alpina (Baker, 1895)
Hosts: *Mus* spp. (1)
Neotoma cinerea (1)
Peromyscus maniculatus (2)
Dist.: Alta
Records: 1. Holland 1952a; 2. Hopkins and Rothschild 1962

Stenoponia americana (Baker, 1899)
Syn.: *Hystrichopsylla americana* Baker, 1899
Hosts: *Blarina brevicauda* (8)
B. b. manitobensis (6)
B. b. talpoides (3, 8)
Clethrionomys gapperi (4, 5, 8)
C. g. loringi (6, 8)
C. g. ochraceus (1, 3)
Clethrionomys spp. (8)
Microsorex h. hoyi (6, 8)
Microtus ochrogaster minor (4)
Mus spp. (4)
Napaeozapus insignis (7)
N. i. insignis (8)
Peromyscus maniculatus abietorum (3)
P. m. gracilis (2, 3)
Tamiasciurus hudsonicus (5)
Dist.: Alta, Man, NB, NS, Ont, Que
Records: 1. Morris 1943 (NB, Que); 2. Holland 1949 (Man, Ont); 3. Brown 1955 (NB, Que); 4. Hopkins and Rothschild 1962 (Alta, Man, Que); 5. Brown 1968 (NB); 6. Buckner and Blasko 1969 (Man); 7. Wright 1979 (NS); 8. Holland 1984 (Man, NS, Ont, Que)

Tamiophila grandis (Rothschild, 1902)
Syn.: *Typhlopsylla grandis* Rothschild, 1902
Hosts: *Sylvilagus floridanus mearnsi* (3)
Tamias striatus (1, 2, 4, 7, 8, 9)
T. s. griseus (4)
T. s. lysteri (3, 5, 6)
Chipmunk (4)
Cottontail rabbit (4)
Dist.: Ont, Que
Records: 1. Rothschild 1902 (Ont); 2. Wagner 1936 (Que); 3. Jameson 1943 (Ont); 4. Holland 1949 (Ont); 5. Judd 1950 (Ont), 6. 1954a (Ont); 7. Scholten et al. 1962 (Ont); 8. Brown 1968 (Ont); 9. Holland 1984 (Ont)

Trichopsylloides oregonensis Ewing, 1938
Host: *Mustela vison energumenos*
Dist.: BC
Record: Holland 1941a

Family ISCHNOPSYLLIDAE

Myodopsylla gentilis Jordan and Rothschild, 1921
Hosts: *Myotis lucifugus* (3, 5)
M. l. alascensis (3, 5)
M. l. lucifugus (5)
M. yumanensis saturatus (3)
Myotis spp. (5)
Bat (1, 2, 3, 4, 5)
Dist.: Alta, BC, Ont, Que
Records: 1. Jordan and Rothschild 1921 (BC); 2. Holland 1939b (BC), 3. 1949 (BC); 4. Hopkins and Rothschild 1956 (Alta); 5. Holland 1984 (Alta, BC, Ont, Que)

Myodopsylla insignis (Rothschild, 1903)
Syn.: *Ceratopsylla insignis* Rothschild, 1903
Hosts: *Eptiscus fuscus* (7)
E. f. fuscus (16)
E. f. pallidus (5)
Myotis keeni septentrionalis (5)
M. lucifugus (1, 3, 5, 6, 7, 11, 15, 16)
M. l. lucifugus (2, 4, 9, 13)
M. l. pernox (16)
Myotis spp. (5, 12, 14, 16)
Bat (7, 8, 10, 16)
Brown bat (5)
Dist.: Alta, BC, Man, NB, Nfld, NS, Ont, PEI, Que, Sask, YT Records: 1. Rothschild 1903 (Ont); 2. Dymond 1938 (Ont); 3. Fuller 1943 (Ont); 4. Jameson 1943 (Ont); 5. Holland 1949 (Alta, BC, Ont, Sask); 6. Judd 1953 (Ont); 7. Hopkins and Rothschild 1956 (Ont, Que); 8. Smit 1958 (Alta); 9. Harper 1961 (Nfld); 10. Robert 1962 (Que); 11. Wilson 1967 (NB); 12. Brown 1968 (NB); 13. Buckner 1971 (Man); 14. Wright 1979 (NS); 15. Jones and Thomas 1983 (PEI); 16. Holland 1984 (Alta, NS, Ont, Que, YT)

Myodopsylla palposa (Rothschild, 1904)
Syn.: *Ceratopsylla palposus* Rothschild, 1904
Myodopsylloides palposus (Rothschild, 1904)
Rhinolophopsylla palposus (Rothschild, 1904)
Hosts: *Eptesicus fuscus* (6, 7, 8)
E. f. fuscus (2, 3, 4, 5)
Mus musculus (8)
Bat (8)
Brown bat (1, 6)
Dist.: BC
Records: 1. Rothschild 1904; 2. Wagner 1936a; 3. Spencer 1939a; 4. Wagner 1940; 5. Holland 1941a, 6. 1949; 7. Hopkins and Rothschild 1956; 8. Holland 1984

Nycteridopsylla vancouverensis Wagner, 1936
Host: *Lasionycteris noctivagans*
Dist.: BC
Records: Wagner 1936; Holland 1984

Family LEPTOPSYLLIDAE

Amphipsylla sibirica pollionis (Rothschild, 1905)
Syn.: *Ceratophyllus pollionis* Rothschild, 1905
Hosts: *Clethrionomys gapperi* (5)
C. g. athabascae (4)
C. g. loringi (1)
C. g. saturata (2, 3)

C. rutilus (5)
C. r. dawsoni (5)
Clethrionomys spp. (5)
Lemmus sibiricus (5)
Microtus longicaudus (5)
M. oeconomus (5)
M. pennsylvanicus (5)
M. p. drummondii (1, 2, 3, 5)
M. xanthognathus (5)
Microtus spp. (5)
Peromyscus maniculatus (5)
Synaptomys spp. (5)
Dist.: Alta, BC, Nfld, YT
Records: 1. Rothschild 1905 (Alta); 2. Wagner 1936a (Alta); 3. Brown 1944 (Alta); 4. Holland 1949 (Alta), 5. 1984 (Alta, BC, Nfld, YT)

Amphipsylla washingtona Hubbard, 1954
Host: Pallid vole
Dist.: Alta
Record: Holland 1984

Ctenophyllus armatus (Wagner, 1901)
Syn.: *Ctenophyllus terribilis* Rothschild, 1903
Hosts: *Ochotona collaris* (7)
O. princeps (1, 2, 3, 5, 7)
O. p. brooksi (4, 5, 6, 7)
O. p. cuppes (4, 5)
O. p. fenisex (5)
O. p. princeps (5)
Ochotona spp. (7)
Dist.: Alta, BC, YT
Records: 1. Rothschild 1903 (Alta); 2. Wagner 1936a (Alta); 3. Holland 1940c (BC); 4. Jellison 1941 (BC); 5. Holland 1949 (Alta, BC); 6. Hopkins and Rothschild 1971 (BC); 7. Holland 1984 (Alta, BC, YT)

Dolichopsyllus stylosus (Baker, 1904)
Hosts: *Aplodontia rufa* (3)
A. r. rufa (1)
Mustela vison energumenos (2, 3)
Dist.: BC
Records: 1. Holland 1949; 2. Hopkins and Rothschild 1971; 3. Holland 1984

Leptopsylla segnis (Schnherr, 1811)
Syn.: *Ctenopsyllus segnis* (Schonherr, 1811)
Host: *Mus musculus*
Dist.: BC, Nfld
Records: Holland 1941a (BC), 1984 (Nfld)

Odontopsyllus dentatus (Baker, 1904)
Hosts: *Sylvilagus nuttallii grangeri*
Sylvilagus spp.
Dist.: Alta, Sask
Records: Holland 1949

Odontopsyllus multispinosus (Baker, 1898)
Host: *Silvilagus* spp.
Dist.: Alta
Record: Brown 1944

Peromyscopsylla catatina (Jordan, 1928)
Hosts: *Blarina brevicauda angusta* (7)
B. b. manitobensis (8)
Clethrionomys gapperi (1, 5, 7, 10, 12)
C. g. gaspeanus (7)
C. g. loringi (6, 12)
C. g. ochraceus (3)
C. g. proteus (2, 12)
Clethrionomys spp. (12)
Microtus chrotorrhinus (11, 12)
M. c. chrotorrhinus (1, 7)
M. pennsylvanicus (12)
M. p. drummondii (6)
Napaeozapus insignis (12)
N. i. frutectanus (1)
N. i. insignis (12)
Peromyscus maniculatus (4, 5)
P. m. bairdii (8, 12)
Sorex cinereus (12)
S. c. cinereus (8)
Synaptomys spp. (7)
Tamiasciurus hudsonicus (12)
T. h. hudsonicus (1)
Dist.: Man, NB, Nfld, NS, NWT, Ont, Que
Records: 1. Holland 1949 (Ont); 2. Johnson and Traub 1954 (Que, Nfld); 3. Brown 1955 (NB); 4. Harper 1956 (NWT); 5. Robert 1962 (Que); 6. Buckner 1964 (Man); 7. Brown 1968 (NB); 8. Buckner and Blasko 1969 (Man); 9. Hopkins and Rothschild 1971 (Nfld); 10. Wright 1979 (NS); 11. Whitaker and French 1982 (NB); 12. Holland 1984 (Man, Nfld, NS, Ont)

Remarks: Harper (1956) recorded the host as *Peromyscus maniculatus drummondi*. Because of the doubtful nature of this subspecies we used *P. maniculatus*.

Peromyscopsylla hamifer hamifer (Rothschild, 1906)
Syn.: *Ctenopsyllus hamifer* Rothschild, 1906
Peromyscopsylla hamifer markworthi Hubbard, 1949
Hosts: *Clethrionomys gapperi* (8)
C. g. loringi (6, 8)
C. g. proteus (5)
C. rutilus (8)
Microtus longicaudus (7, 8)
M. pennsylvanicus (4, 5, 7, 8)
M. p. drummondii (8)
M. p. enixus (7, 8)
M. p. labradorius (5, 7, 8)
M. p. pennsylvanicus (3)
M. xanthognathus (8)
Microtus spp. (8)
Mustela erminea (5, 6)
M. e. cicognani (5)
Mustela spp. (1, 2, 5, 7, 8)
Mus spp. (7)
Sorex cinereus (8)
Dist.: Alta, BC, Man, Nfld, NWT, Ont, Que, Sask
Records: 1. Rothschild 1906 (Alta); 2. Brown

1944 (Alta); 3. Baker 1946 (Que); 4. Hubbard 1949a (Ont); 5. Johnson and Traub 1954 (Alta, Nfld, NWT, Ont, Que); 6. Buckner and Blasko 1969 (Man); 7. Hopkins and Rothschild 1971 (Alta, BC, Nfld, Ont, Que); 8. Holland 1984 (Alta, BC, Man, Nfld, NWT, Ont, Sask)

Peromyscopsylla hesperomys adelpha (Rothschild, 1915)
Hosts: *Clethrionomys* spp. (2)
Lagurus curtatus (2)
Peromyscus spp. (1, 2)
Dist.: Alta, Sask
Records: 1. Johnson and Traub 1954 (Alta); 2. Holland 1984 (Alta, Sask)

Peromyscopsylla hesperomys hesperomys (Baker, 1904)
Hosts: *Microtus* spp. (4)
Peromyscus leucopus (3, 4)
P. maniculatus (3)
Peromyscus spp. (1, 2, 4)
Dist.: NS, Ont, Que
Records: 1. Holland 1952a (Ont, Que); 2. Johnson and Traub 1954 (Ont); 3. Wright 1979 (NS); 4. Holland 1984 (NS, Ont, Que)

Peromyscopsylla hesperomys pacifica Holland, 1949
Hosts: *Microtus oregoni serpens* (3)
Peromyscus maniculatus (3)
P. m. austerus (1, 2)
P. m. interdictus (1)
P. m. oreas (1, 2)
Peromyscus spp. (3)
Dist.: BC
Records: 1. Holland 1949; 2. Hopkins and Rothschild 1971; 3. Holland 1984

Peromyscopsylla ostsibirica longiloba (Jordan, 1939)
Hosts: *Microtus oeconomus*
Microtus spp.
Dist.: YT
Record: Holland 1984

Peromyscopsylla ravalliensis (Dunn, 1923)
Syn.: *Ctenopsyllus ravalliensis* Dunn, 1923
Ctenopsyllus rawailliensis Dunn and Parker, 1923
Hosts: *Neotoma cinerea* (2, 3, 4)
N. c. occidentalis (1, 2)
Neotoma spp. (3, 4)
Ochotona princeps (2)
Peromyscus maniculatus (2)
Dist.: Alta, BC
Records: 1. Wagner 1936 (BC); 2. Holland 1949 (BC); 3. Hopkins and Rothschild 1971 (Alta, BC); 4. Holland 1984 (Alta, BC)

Peromyscopsylla scotti Fox, 1939
Host: *Peromyscus leucopus*
Dist.: Ont
Records: 1. Holland 1952a, 2. 1984

Peromyscopsylla selenis (Rothschild, 1906)
Syn.: *Ctenopsyllus selenis* Rothschild, 1906
Hosts: *Clethrionomys gapperi* (3, 4)
C. g. athabascae (3, 4)
C. g. loringi (1, 4)
C. g. saturatus (1, 3)
C. rutilus (4)
C. r. dawsoni (4)
Clethrionomys spp. (4)
Martes americana (3)
Microtus longicaudus (3, 4)
M. l. macrurus (4)
M. l. vellerosus (4)
M. oeconomus operarius (4)
M. oregoni serpens (3, 4)
M. pennsylvanicus (4)
M. p. drummondii (1, 4)
M. t. townsendii (4)
Microtus spp. (3, 4)
Peromyscus maniculatus (3, 4)
P. m. borealis (1, 3, 4)
Peromyscus spp. (4)
Phenacomys intermedius (3, 4)
Rattus norvegicus (3)
Sorex spp. (3, 4)
Spermophilus r. richardsonii (3)
Synaptomys b. borealis (3)
Synaptomys spp. (4)
Tamiasciurus hudsonicus (4)
Zapus hudsonius (2, 4)
Z. princeps (4)
Zapus spp. (1)
Dist.: Alta, BC, Man, NWT, Sask, YT
Records: 1. Rothschild 1906 (Alta, BC); 2. Brown 1944 (Alta); 3. Holland 1949 (Alta, BC, Man, NWT, Sask), 4. 1984 (Alta, BC, Man, NWT, Sask, YT)

Family PULICIDAE

Cediopsylla inaequalis inaequalis (Baker, 1895)
Hosts: *Lepus* spp. (2, 4)
Sylvilagus nuttallii (1)
S. n. grangeri (3)
Sylvilagus spp. (3)
Vulpes vulpes (5)
Dist.: Alta, Sask
Records: 1. Holland 1941a (Alta); 2. Brown 1944 (Alta); 3. Holland 1949 (Alta, Sask); 4. Hopkins and Rothschild 1953 (Alta); 5. Holland 1984 (Sask)

Cediopsylla simplex (Baker, 1895)
Hosts: *Lepus capensis hybridus* (2)
Sylvilagus floridanus (3)
S. f. mearnsii (1)
Vulpes vulpes (3)
Cottontail rabbit (3)
Dist.: Ont
Records: 1. Holland 1949; 2. Judd 1953; 3. Holand 1984

Ctenocephalides canis (Curtis, 1826)
Hosts: *Rattus norvegicus* (1)

Spilogale putorius phenax (2)
Vulpes vulpes (2)
Dist.: BC, Ont
Records: 1. Holland 1941 (BC), 2. 1984 (BC, Ont)

Ctenocephalides felis (Bouch, 1835)
Host: *Rattus norvegicus*
Dist.: BC
Record: Holland 1940c

Ctenocephalides felis felis (Bouch, 1835)
Hosts: *Rattus norvegicus* (1, 2)
Spilogale spp. (2)
Dist.: BC
Records: 1. Holland 1941b, 2. 1984

Euhoplopsyllus glacialis affinis (Baker, 1904)
Syn.: *Hoplopsyllus affinis* (Baker, 1904)
Hosts: *Lepus* spp.
Silvilagus floridanus
Dist.: Sask
Records: Holland 1949, 1984

Euhoplopsyllus glacialis glacialis (Taschenberg, 1880)
Syn.: *Hoplopsyllus glacialis* (Taschenberg, 1880)
Hosts: *Lepus arcticus* (1, 2, 4)
L. a. arcticus (3, 4)
Dist.: NWT
Records: 1. Jordan 1932; 2. Holland 1949; 3. Hopkins and Rothschild 1953; 4. Holland 1984

Euhoplopsyllus glacialis lynx (Baker, 1904)
Syn.: *Hoplopsyllus glacialis lynx* (Baker, 1904)
Hosts: *Lepus americanus* (2, 4, 5, 8)
L. a. bairdii (4)
L. a. columbianus (4)
L. a. dalli (1, 8)
L. a. struthopus (6, 7)
Lepus spp. (8)
Lynx canadensis (4, 5, 8)
L. rufus (8)
L. r. baileyi (8)
L. r. fasciatus (2, 4, 5)
Lynx spp. (3, 5, 8)
Mustela erminea (8)
Ochotona spp. (8)
Vulpes vulpes (8)
V. v. rubricosa (7)
Bush rabbit (4, 8)
Fox (8)
Hare (4)
Rabbit (8)
Dist.: Alta, BC, NB, NWT, YT
Records: 1. Jordan 1932 (BC); 2. Wagner 1936 (BC); 3. Kohls 1940 (YT); 4. Holland 1949 (Alta, BC, NB, NWT); 5. Hopkins and Rothschild 1953 (Alta, BC, NB); 6. Brown 1955 (NB), 7. 1968 (NB); 8. Holland 1984 (Alta, BC, NWT, YT)

Pulex irritans Linnaeus, 1758
Hosts: *Canis latrans* (4, 5, 6)
Lepus townsendii (6)
L. t. campanius (4)
Lepus spp. (1, 5)
Lynx spp. (1, 5)
Odocoileus hemionus columbianus (3)
Taxidea taxus (2, 6)
Vulpes vulpes (1, 5, 6)
Fox (6)
Dist.: Alta, BC, Man, PEI, Sask
Records: 1. Jordan and Rothschild 1908 (Alta); 2. Brown 1944 (Alta); 3. Cowan 1946 (BC); 4. Holland 1949 (Alta, Man, PEI); 5. Hopkins and Rothschild 1953 (Alta, Man); 6. Holland 1984 (Man, Sask)

Xenopsylla cheopis (Rothschild, 1903)
Hosts: *Rattus norvegicus* (1, 2, 3, 4, 5, 6, 7, 8)
R. rattus alexandrinus (3, 6)
R. r. rattus (6)
Dist.: Alta, BC, NB, NS, Ont, Que
Records: 1. Spencer 1936 (BC); 2. Gibbons and Humphreys 1941 (Alta); 3. Holland 1940c (BC), 4. 1941b (BC), 5. 1944 (BC), 6. 1949 (BC); 7. McKiel et al. 1960 (NB, NS, Ont, Que); 8. Holland 1984 (Ont, Que)

Family VERMIPSYLLIDAE

Chaetopsylla lotoris (Stewart, 1926)
Syn.: *Trichopsylla lotoris* Stewart, 1926
Hosts: *Procyon lotor* (1, 2)
Vulpes vulpes (2)
Dist.: Ont
Records: 1. Holland 1952a, 2. 1984

Chaetopsylla setosa Rothschild, 1906
Syn.: *Arctopsylla setosa* (Rothschild, 1906)
Trichopsylla setosus (Rothschild, 1906)
Hosts: *Canis latrans* (1)
Erethizon dorsatum (5)
Gulo gulo luscus (4)
Lynx canadensis (4)
Ursus americanus (1)
U. arctos (2, 3, 4)
Dist.: BC
Records: 1. Rothschild 1906; 2. Spencer 1936; 3. Wagner 1936; 4. Holland 1949, 5. Holland 1984

Chaetopsylla tuberculaticeps (Bezzi, 1890)
Syn.: *Arctopsylla ursi* (Rothschild, 1902)
Pulex ursi Rothschild, 1902
Trichopsylla ursi (Rothschild, 1902)
Hosts: *Ursus americanus* (5)
U. arctos (1, 2, 3, 4, 7)
Dist.: Alta, BC
Records: 1. Rothschild 1902 (Alta); 2. Wagner 1936a (Alta); 3. Holland 1941 (BC); 4. Brown 1944 (Alta); 5. Hubbard 1947 (Alta); 6. Hopkins and Rothschild 1956 (Alta); 7. Holland 1984 (BC)

ORDER SIPHUNCULATA

Family HAEMATOPINIDAE

Linognathoides montanus Osborn, 1912
Host: *Spermophilus* spp.
Dist.: Canada
Record: McLeod 1933

Remarks: McLeod (1933) stated that this species is found "Practically all over the North American continent".

Family HOPLOPLEURIDAE

Enderleinellus marmotae Ferris, 1919
Host: *Marmota monax*
Dist.: Ont
Record: Scholten et al. 1962

Enderleinellus nitschi Fahrenholz, 1916
Hosts: *Napaeozapus insignis* (2)
Tamiasciurus hudsonicus (1, 2)
Dist.: Ont, Que
Records: 1. Scholten et al. 1962 (Ont); 2. Gyorkos and Hilton 1982 (Que)

Enderleinellus suturalis (Osborn, 1891)
Hosts: *Spermophilus columbianus*
S. franklinii
S. richardsonii
Dist.: Alta
Record: Hilton and Mahrt 1971

Fahrenholzia pinnata Kellogg and Ferris, 1915
Hosts: *Perognathus parvus laingi*
P. p. lordi
Dist.: BC
Record: Spencer 1966

Haemodipsus ventricosus Penny, 1842
Hosts: *Lepus capensis hybridus* (1)
Lab rabbit (2)
Dist.: BC, Ont
Record: 1. Judd 1953 (Ont); 2. Spencer 1966 (BC)

Haemodipsus spp.
Host: *Lepus europaeus*
Dist.: Ont
Record: Judd 1950

Remarks: Judd (1950) believed his specimens may have been *Haemodipsus ventricosus.*

Hoplopleura acanthopus (Burmeister, 1839)
Hosts: *Blarina brevicauda* (1)
Clethrionomys gapperi (3)
C. g. saturatus (5)
Dicrostonyx groenlandicus (4)
Lemmus sibiricus trimucronatus (5)
Microtus longicaudus (5)
M. l. vellerosus (5)
M. montanus canescens (5)
M. oregoni serpens (5)
M. pennsylvanicus (3, 6)
M. p. drummondii (5)
M. p. pennsylvanicus (1, 2)
M. townsendii (5)
Neotoma cinerea occidentalis (5)
Ochotona princeps fenisex (5)
Rattus norvegicus (5)
Sorex c. cinereus (5)
Synaptomys borealis (7)
S. b. chapmani (5)
S. cooperi (7)
Thomomys talpoides fuscus (5)
Dist.: Alta, BC, NB, NWT, Ont, Sask
Records: 1. Judd 1953 (Ont), 2. 1954a (Ont); 3. Scholten et al. 1962 (Ont); 4. McAlpine 1965 (NWT); 5. Spencer 1966 (Alta, BC, NWT, Ont); 6. Wilson 1967 (Sask); 7. Whitaker and French 1982 (NB)

Remarks: Spencer (1966) recorded *Microtus montanus canescens* as *M. microtus canascens.*

Hoplopleura arboricola (Kellogg and Ferris, 1915)
Hosts: *Eutamias amoenus affinis*
E. a. luteiventris
Dist.: BC
Record: Spencer 1966

Hoplopleura erratica (Osborn, 1896)
Host: *Tamias striatus*
Dist.: Ont, Que
Records: Scholten et al. 1962 (Ont); Gyorkos and Hilton 1982 (Que)

Hoplopleura hesperomydis (Osborn, 1891)
Hosts: *Clethrionomys gapperi* (3)
Mus musculus (1)
Peromyscus maniculatus (1, 3, 4, 5)
P. m. artemisiae (2)
P. m. austerus (2)
P. m. oreas (2)
P. m. prevostensis (2)
Peromyscus spp. (2)
Tamiasciurus hudsonicus (3)
Dist.: BC, NB, NS, Ont, Que
Records: 1. Scholten et al. 1962 (Ont); 2. Spencer 1966 (BC); 3. Gyorkos and Hilton 1982 (Que); 4. Wright 1979 (NS); 5. Whitaker and French 1982 (NB)

Hoplopleura oenomydis Ferris, 1921
Host: *Rattus norvegicus*
Dist.: BC
Record: Spencer 1966

Hoplopleura sciuricola Ferris, 1921
Hosts: *Tamiasciurus douglasii mollipilosus* (2)
T. hudsonicus (1, 2, 3)
T. h. streatori (2)
Dist.: Alta, BC
Records: 1. Thompson 1934 (Alta); 2. Spencer 1966 (BC); 3. Mahrt and Chai 1972 (Alta)

Hoplopleura trispinosa Kellogg and Ferris, 1915
Hosts: *Glaucomys sabrinus columbiensis* (2)
G. s. oregonensis (1, 2)

Dist.: Alta, BC
Records: 1. Spencer 1956 (Alta, BC), 2. 1966 (BC)

Microphthirus uncinatus (Ferris, 1916)
Syn.: *Enderleinellus uncinatus* Ferris, 1916
Host: *Glaucomys sabrinus oregonensis*
Dist.: Alta, BC
Records: Spencer 1956 (Alta, BC), 1966 (BC)

Neohaematopinus inornatus Kellogg and Ferris, 1915
Syn.: *Linognathoides inornatus* Kellogg and Ferris, 1916
Host: *Neotoma cinerea occidentalis*
Dist.: BC
Record: Spencer 1966

Neohaematopinus laeviusculus (Grube, 1851)
Hosts: *Spermophilus columbianus* (2)
S. c. columbianus (1)
S. richardsonii (2)
S. parryii (1)
Dist.: Alta, BC, NWT
Records: 1. Spencer 1966 (BC, NWT); 2. Hilton and Mahrt 1971 (Alta)

Neohaematopinus marmotae Ferris, 1923
Hosts: *Cynomys l. ludovicianus* (2)
Marmota caligata okanagana (2)
M. flaviventris avara (1, 2)
M. monax petrensis (2)
Mustela frenata nevadensis (2)
Dist.: BC, Sask
Records: 1. Holland 1938 (BC); 2. Spencer 1966 (BC, Sask)

Neohaematopinus sciurinus (Mjberg, 1910)
Syn.: *Neohaematopinus antennatus semifasciatus* Ferris, 1916
Hosts: *Microtus pennsylvanicus* (5)
Sciurus carolinensis (1)
S. c. pennsylvanicus (3)
Tamiasciurus hudsonicus (2, 4)
T. h. columbiensis (3)
T. h. lanuginosus (3)
T. h. streatori (3)
Dist.: Alta, BC, Ont, Que
Records: 1. Judd 1954a (Ont); 2. Scholton et al. 1962 (Ont); 3. Spencer 1966 (BC); 4. Mahrt and Chai 1972 (Alta); 5. Gyorkos and Hilton 1982 (Que)

Neohaematopinus sciuropteri (Osborne, 1891)
Hosts: *Eutamias amoenus affinus* (3)
Glaucomys sabrinus (3)
G. s. alpinus (3)
G. s. columbiensis (3)
G. s. oregonensis (1, 3)
Tamias striatus (2)
Dist.: Alta, BC, Ont
Records: 1. Spencer 1956 (Alta, BC); 2. Scholten et al. 1962 (Ont); 3. Spencer 1966 (Alta, BC)

Polyplax alaskensis Ewing, 1927
Hosts: *Clethrionomys rutilus* (1)
Microtus pennsylvanicus (2)
Dist.: NB, NWT
Records: 1. Mitchell and Behin 1965 (NWT); 2. Whitaker and French 1982 (NB)

Polyplax auricularis Kellogg and Ferris, 1915
Host: *Peromyscus maniculatus borealis*
Dist.: Alta
Record: Spencer 1966

Polyplax spinulosa Burmeister, 1839
Syn.: *Haematopinus spinulosus* (Burmeister, 1839)
Hosts: *Microtus oregoni serpens* (5)
Rattus norvegicus (1, 2, 3, 4, 5)
R. r. rattus (5)
Rattus spp. (5)
Dist.: BC, Que
Records: 1. Whitehead 1934 (BC); 2. Spencer 1937 (BC), 3. 1939b (BC); 4. Firlotte 1948 (Que); 5. Spencer 1966 (BC)

Family LINOGNATHIDAE

Solenopotes ferrisi (Fahrenholz, 1919)
Syn.: *Cervophthirius ferrisi*
Linognathus ferrisi Fahrenholz, 1919
Hosts: *Cervus canadensis* (4)
Odocoileus hemionus (6)
O. h. columbianus (2, 4)
O. virginianus (3, 5, 6)
Odocoileus spp. (1)
Tamiasciurus hudsonicus columbianus (4)
Dist.: Alta, BC, Ont
Records: 1. Spencer 1938a (BC); 2. Cowan 1946 (BC); 3. Scholten et al. 1962 (Ont); 4. Spencer 1966 (Alta, BC); 5. Watson and Anderson 1975 (Ont); 6. Samuel et al. 1980 (Alta)

HOST-PARASITE LIST

CLASS MAMMALIA

ORDER ARTIODACTYLA

Family ANTILOCAPRIDAE

Antilocapra a. americana (Ord) Pronghorn
CHELICERATA
ACARI
Dermacentor andersoni (Alta)

Family BOVIDAE

Bison bison (L.) Bison
UNIRAMIA
MALLOPHAGA
Damalinia sedecimdecembrii (NWT)

Oreamnos americanus (de Blainville) Mountain goat
CHELICERATA
ACARI
Dermacentor albipictus (Alta)
D. andersoni (Alta, BC)
Otobius megnini (Alta, BC)
UNIRAMIA
MALLOPHAGA
Unidentified Mallophaga (Alta)

Oreamnos americanus missoulae (Allen)
CHELICERATA
ACARI
Dermacentor andersoni (BC)
UNIRAMIA
MALLOPHAGA
Damalinia oreamnidis (Alta)

Ovis canadensis Shaw Mountain sheep
CHELICERATA
ACARI
Dermacentor albipictus (Alta)
D. andersoni (Alta, BC)
Otobius megnini (BC)
Psoroptes ovis (Alta)

Ovis canadensis californiana Douglas
CHELICERATA
ACARI
Dermacentor albipictus (BC)
Otobius megnini (BC)
UNIRAMIA
DIPTERA
Melophagus ovinus montanus (Alaska-Yukon boundary)
MALLOPHAGA
Damalinia ovis (BC)

Ovis canadensis canadensis Shaw
CHELICERATA
ACARI
Dermacentor andersoni (BC)

Family CERVIDAE

Alces alces (L.) Moose
CHELICERATA
ACARI
Dermacentor albipictus (Alta, BC, Man, NB, NS, Ont, Que, Sask)
Dermacentor andersoni (Alta, BC, Ont)
UNIRAMIA
DIPTERA
Cephenemyia jellisoni (Ont)
C. phobifer (Ont)
Cephenemyia sp. (BC, Ont)

Alces alces americana (Clinton)
Syn.: *Alces americanus*
CHELICERATA
ACARI
Dermacentor albipictus (Alta, BC)
UNIRAMIA
DIPTERA
Cephenemyia jellisoni (Ont)
C. phobifera (Ont)
Cephenemyia spp. (BC)
Alces alces andersoni Peterson
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)

Cervus elaphus L. Wapiti
CHELICERATA
ACARI
Dermacentor albipictus (Alta, BC, Que, Sask)
D. andersoni (Alta)
Otobius megnini (BC)
UNIRAMIA
DIPTERA
Cephenemyia jellisoni (Alta)
MALLOPHAGA
Mallophaga gen. spp. (Alta)

Cervus elaphus canadensis Erxleben
Syn.: *Cervus canadensis* Erxleben
CHELICERATA
ACARI
Dermacentor albipictus (Alta, BC)
UNIRAMIA
DIPTERA
Cephenemyia jellisoni (Alta)
MALLOPHAGA
Damalinia concavifrons (Alta, BC)
D. longicornis (Alta)
SIPHUNCULATA
Solenopotes ferrisi (Alta)

Cervus elaphus nelsoni Bailey
Syn.: *Cervus canadensis nelsoni* Bailey
UNIRAMIA
MALLOPHAGA
Damalinia concavifrons (Alta)
D. longicornis (Alta)

Odocoileus hemionus (Rafinesque) Mule deer
CHELICERATA

ACARI
Dermacentor albipictus (Alta, BC, Sask)
D. andersoni (BC)
Haemaphysalis leporis-palustris (Ont)
Ixodes pacificus (BC)
Otobius megnini (BC)
UNIRAMIA
DIPTERA
Cephenemyia apicata (Alta, BC)
C. jellisoni (Alta, BC)
C. trompe (Ont)
Lipoptena depressa (BC)
Neolipoptena ferrisi (BC)
MALLOPHAGA
Trichodectes parallelus (Alta)
Tricholipeurus lipeuroides (Alta)
T. parallelus (Alta, BC)
SIPHUNCULATA
Solenopotes ferrisi (Alta)

Odocoileus heminonus columbianus (Richardson)
CHELICERATA
ACARI
Dermacentor albipictus (BC)
D. andersoni (BC)
Ixodes californicus (BC)
I. pacificus (BC)
UNIRAMIA
DIPTERA
Cephenemyia jellisoni (BC)
Lipoptena depressa (BC)
Neolipoptena ferrisi (BC)
Phormia regina (BC)
MALLOPHAGA
Tricholipeurus lipeuroides (BC)
T. parallelus (BC)
Tricholipeurus spp. (BC)
SIPHONAPTERA
Pulex irritans (BC)
SIPHUNCULATA
Solenopotes ferrisi (BC)

Odocoileus hemionus hemionus (Rafinesque)
CHELICERATA
ACARI
Dermacentor albipictus (BC)
D. andersoni (BC)
UNIRAMIA
DIPTERA
Cephenemyia jellisoni (BC)
Lipoptena depressa (BC)
Neolipoptena ferrisi (BC)
MALLOPHAGA
Trichodectes tibialis (BC)
Tricholipeurus lipeuroides (Alta, BC)
T. parallelus (BC)

Odocoileus virginianus (Zimmermann)
White-tailed deer
CHELICERATA
ACARI
Dermacentor albipictus (Alta, Ont)
Haemaphysalis leporis-palustris (Ont)
Ixodes scapularis (Ont)
Otobius megnini (BC)
Otodectes cynotis (Alta)
Trombiculidae gen. spp. (Ont)
UNIRAMIA
DIPTERA
Cephenemyia phobifera (Ont)
C. trompe (Ont)
Cephenemyia spp. (Ont)
Lipoptena depressa (BC)
Neolipoptena ferrisi (BC)
MALLOPHAGA
Tricholipeurus lipeuroides (Alta, Ont)
T. parallelus (Alta, NS, Ont)
SIPHUNCULATA
Solenopotes ferrisi (Alta,Ont)

Odocoileus virginianus borealis Miller
UNIRAMIA
MALLOPHAGA
Tricholipeurus lipeuroides (Que)

Odocoileus spp.
UNIRAMIA
DIPTERA
Lipoptena depressa (BC)
MALLOPHAGA
Tricholipeurus parallelus (Ont)
SIPHUNCULATA
Solenopotes ferrisi (BC)

Rangifer tarandus (L.) Caribou
CHELICERATA
ACARI
Chorioptes texanus (NWT)
UNIRAMIA
DIPTERA
Cephenemyia trompe (Man, Nfld, NWT, Sask)
Oedemagena tarandi (Man, NWT)

Rangifer tarandus caribou (Gmelin)
Syn.: *Rangifer caribou sylvestris* Richardson
Syn.: *Rangifer montanus* Thompson-Seton
CHELICERATA
ACARI
Dermacentor albipictus (NS)
UNIRAMIA
DIPTERA
Cephenemyia phobifer (Sask)
C. trompe (Alta, BC)
Oedemagena tarandi (Alta)

Rangifer tarandus groenlandicus (L.)
UNIRAMIA
DIPTERA
Oedemagena tarandi (Alta, BC, NWT, YT)

CERVIDAE OF UNDETERMINED SPECIES

Coast deer
CHELICERATA
ACARI
Dermacentor albipictus (BC)

Ixodes pacificus (BC)
I. ricinus (BC)
UNIRAMIA
DIPTERA
Lipoptena depressa (BC)
L. ferrisi (BC)

Deer
CHELICERATA
ACARI
Dermacentor albipictus (Alta, BC, NS)
D. andersoni (Alta, BC, Ont)
Ixodes cookei (BC)
Otobius megnini (BC)
UNIRAMIA
MALLOPHAGA
Tricholipeurus parallelus (Ont)
SIPHUNCULATA
Solenopotes ferrisi (BC)

ORDER CARNIVORA

Family CANIDAE

Alopex lagopus L. Arctic fox
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Oropsylla alaskensis (NWT,YT)

Alopex lagopus lagopus L.
Syn.: *Alopex lagopus innuitus* (Merriam)
UNIRAMIA
SIPHONAPTERA
Oropsylla alaskensis (NWT, YT)
O. arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Canis latrans Say Coyote
CHELICERATA
ACARI
Dermacentor albipictus (BC)
D. andersoni (Alta, BC)
Ixodes rugosus (BC)
I. sculptus (BC)
Sarcoptes scabiei (Alta)
UNIRAMIA
DIPTERA
Melophagus ovinus montanus (BC)
SIPHONAPTERA
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)
Chaetopsylla setosa (BC)
Megarthroglossus sicamus (BC)
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Que)
Pulex irritans (Alta, Man, PEI, Sask)
Thrassis acamantis (BC)

Canis latrans incolatus Hall
UNIRAMIA
MALLOPHAGA
Trichodectes canis (BC)
Tricholipeurus lipeuroides (BC)

Canis latrans lestes Merriam
UNIRAMIA
MALLOPHAGA
Trichodectes canis (BC)

Canis lupus L. Gray wolf
CHELICERATA
ACARI
Sarcoptes scabiei (Alta)
UNIRAMIA
MALLOPHAGA
Trichodectes canis (Ont)

Canis lupus columbianus Goldman
UNIRAMIA
MALLOPHAGA
Trichodectes canis (BC)

Canis spp.
UNIRAMIA
SIPHONAPTERA
Nearctopsylla brooksi (Alta, BC, YT)
Oropsylla rupestris (Alta)

Vulpes vulpes (L.) Red fox
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)
Ixodes texanus (Ont)
Otodectes cynotis (Que)
Sarcoptes scabiei (Alta)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (NWT)
Cediopsylla i. inaequalis (Sask)
C. simplex (Ont)
Chaetopsylla lotoris (Ont)
Ctenocephalides canis (BC, Ont)
Epitedia w. wenmanni (Ont)
Euhoploplsyllus glacialis lynx (Alta, BC, NWT, YT)
Megabothris abantis (Alta, BC)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas c. caedens (Alta, BC, NWT, Sask, YT)
O. c. durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Oropsylla arctomys (Alta, BC, Man, NB, Ont, Que, Sask)
Pulex irritans (Alta, Man, Sask)

Vulpes vulpes rubricosa Bangs
Syn.: *Vulpes fulva rubricosa* of Brown (1968).
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (NB)

Vulpes spp.
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (NWT)

CANIDAE OF UNDETERMINED SPECIES

Fox
UNIRAMIA

SIPHONAPTERA
Euhoplopsyllus glacialis lynx
(Alta,BC,NWT,YT)

Family FELIDAE

Lynx canadensis Kerr Lynx
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (Alta, BC, NB, NWT, YT)
Foxella ignota albertensis (Alta)
Monopsyllus thambus (Alta)
M. vison (Alta)
Opisodasys vesperalis (BC)
Orchopeas caedens durus (BC, Nfld, NWT)
Oropsylla halaskensis (NWT, YT)
Pulex irritans (Alta)
Trichopsylla setosus (BC)
T. thamba (Alta)

Lynx canadensis canadensis Kerr
UNIRAMIA
MALLOPHAGA
Felicola spenceri (BC)

Lynx rufus Rafinesque Bobcat
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (Alta, BC, NWT, YT)
Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Tarsopsylla octodecimdentata colaradensis (Alta, BC, Man, NWT, Ont, Sask, YT)

Lynx rufus baileyi Merriam
Syn.: *Lynx baileyi* Merriam
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (Alta, BC, NWT, YT)

Lynx rufus fasciatus Rafinesque
Syn.: *Lynx fasciatus* Rafinesque
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (Alta, BC, NB, NWT)

Lynx spp.
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (Alta, BC, NB, NWT, YT)
Megarthroglossus sicamus (BC)
Monopsyllus thambus (Alta)
Nearctopsylla brooksi (Alta, BC)
Orchopeas sexdentatus agilis (Alta, BC, YT)
Pulex irritans (Alta,Man)

Family MUSTELIDAE

Gulo luscus (L.) Wolverine
Syn.: *Gulo gulo* (L.)
Gulo gulo luscus of Holland (1949).
UNIRAMIA
SIPHONAPTERA
Caetopsylla setosa (BC)
Thrassis s. spenceri (BC)

Martes americana (Turton) American marten
Syn.: *Mustela americana*
CHELICERATA
ACARI
Listrophorus mustelae (BC)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus lunatus tundrensis (NWT)
C. vison (Ont)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris atrox (Ont)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla brooksi (Alta, BC, YT)
N. g. genalis (NB, Nfld, Ont, Que)
N. hyrtaci (BC)
Orchopeas caedens (Alta)
O. c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. sexdentatus agilis (Alta, BC, YT)
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask)
Rhadinopsylla arborea (Alta, BC)
R. fraterna (Alta, BC, Sask)
Tarsopsylla octodecimdentata coloradensis (Alta, BC, Man, NWT, Ont, Sask, YT)

Martes americana abietinoides Gray
CHELICERATA
ACARI
Lynxacarus mustelae (BC)
UNIRAMIA
SIPHONAPTERA
Nearctopsylla brooksi (Alta, BC, YT)

Martes americana actuosa (Osgood)
Syn.: *Martes actuosa*
Mustela americana actuosa
UNIRAMIA
SIPHONAPTERA
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)

Martes americana americana (Turton)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus vison (Ont)
Hystrichopsylla dippiei (Ont)
Monopsyllus vison (Ont)
Nearctopsylla grahami (Ont)
Orchopeas caedens durus (Ont)
Oropsylla arctomys (Ont)

Rhadinopsylla fraterna (Ont)
Tarsopsylla octodecimdentata coloradensis (Ont)

Martes americana caurina (Merriam)
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)
Nearctopsylla hyrtaci (BC)

Martes pennanti (Erxleben) Fisher
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Martes pennanti pennanti (Erxleben)
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Mephitis mephitis (Schreber) Striped skunk
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)
Hirstionyssus spp. (Ont)
Ixodes cookei (Ont)
I. kingi (BC, Sask)
I. marmotae (BC)
I. texanus (Ont)
Psocus spp. (Ont)
UNIRAMIA
MALLOPHAGA
Neotrichodectes mephitidis (Ont)
SIPHONAPTERA
Megabothris asio asio (Ont)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Thrassis acamantis (BC)

Mephitis mephitis mephitis (Schreber)
UNIRAMIA
SIPHONAPTERA
Megabothris quirini (Alta, BC, NWT, Ont)
Orchopeas caedens durus (BC, Nfld, NWT)
Oropsylla arctomys (Alta, BC, Man, NB, Ont, Que, Sask)

Mephitis spp.
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Mustela erminea L. Ermine
Syn.: *Mustela arctica* (Merriam)
CHELICERATA
ACARI
Dermacentor andersoni (BC)
Ixodes cookei (NS)
I. kingi (BC)
UNIRAMIA
MALLOPHAGA
Stachiella kingi (Ont)
SIPHONAPTERA
Amalaraeus athabascae (BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT, Que, YT)
C. vison (Ont)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Dactylopsylla rara (Alta, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Euhoplopsyllus glacialis lynx (Alta, BC, NWT, YT)
Foxella ignota albertensis (Alta, Sask)
F. i. recula (Man)
Megabothris abantis (Alta, BC)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. a. megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. atrox (Ont)
M. calcarifer gregsoni (NWT, YT)
M. groenlandicus (Can, Nfld, Que, YT)
M. quirini (Alta, BC, Man, Nfld, NWT, Ont, Que)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla brooksi (Alta, BC, YT)
N. g. genalis (NB, Nfld, Ont, Que)
N. g. hygini (Alta, Man, Sask)
N. hyrtaci (Alta, BC)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Oropsylla alaskensis (NWT)
Paramyscopsylla h. hamifer (Alta, Man, NWT, Nfld, Ont, Que)
Rhadinopsylla difficilis (BC)
R. media (Alta,Que)

Mustela erminea anguinae Hall
UNIRAMIA
MALLOPHAGA
Trichodectes ermineae (BC)
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)

Mustela erminea arctica (Merriam)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Ceratophyllus lunatus tundrensis (NWT)
Foxella ignota albertensis (Alta, Sask)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla genalis hygini (Alta, Man, Sask)
Oropsylla alaskensis (NWT)

Mustela erminea bangsi Hall
UNIRAMIA
SIPHONAPTERA
Nearctopsylla genalis hygini (Alta,Man)

Mustela erminea cicognanii Bonaparte
Syn.: *Mustela cicognanii cicognanii*
Putorius cicognani of Holland (1984).
UNIRAMIA
SIPHONAPTERA
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT, Que, YT)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris abantis (Alta, BC)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla brooksi (Alta, BC, YT)
N. g. genalis (NB, Nfld, Ont, Que)
N. g. hygini (Alta, Man, Sask)
N. hyrtaci (Alta, BC)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Peromyscopsylla h. hamifer (Alta, Nfld, NWT, Ont, Que)

Mustela erminea fallenda Hall
UNIRAMIA
SIPHONAPTERA
Megabothris abantis (Alta, BC)
Monopsyllus ciliatus protinus (BC)
Orchopeas nepos (BC)

Mustela erminea invicta Hall
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Malaraeus bitterootensis (Alta)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla brooksi (Alta, BC, YT)
N. genalis hygini (Alta)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)

Mustela erminea richardsonii Bonaparte
Syn.: *Mustela cicognani richardsonii*
Putorius richardsonii of Holland (1984).
UNIRAMIA
MALLOPHAGA
Trichodectes ermineae (BC)
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla brooksi (Alta, BC, YT)
N. g. genalis (NB)
N. g. hygini (Alta, Man, Sask)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (NB)

Mustela frenata Lichtenstein Long-tailed weasel
CHELICERATA
ACARI
Ixodes sculptus (Alta)
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Foxella ignota albertensis (Alta, Sask)
F. i. recula (BC)
Megabothris abantis (Alta, BC, YT)
M. asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. eumolpi (Alta, BC, Ont, Sask)
M. lucifer (Alta, BC, Sask)
Monopsyllus vison (BC)
Nearctopsylla brooksi (Alta, BC, YT)
N. hyrtaci (Alta, BC)
O. sexdentatus agilis (Alta, BC, YT)
Oropsylla idahoensis (Alta, BC, YT)

Mustela frenata arizonensis (Mearns)
Syn.: *Mustela arizonensis* (Mearns)
UNIRAMIA
SIPHONAPTERA
Foxella ignota recula (BC)
Monopsyllus w. wagneri (BC)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. sexdentatus agilis (Alta, BC, YT)

Mustela frenata longicauda Bonaparte
Syn.: *Mustela longicauda* Bonaparte
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, Que)
Hystrichopsylla d. dippiei (Alta, Man, Ont)
H. gigas dippiei (Alta)
Malaraeus euphorbi (Alta, BC, Sask)
Megabothris lucifer (Alta, BC, Sask)
M. quirini (Alta, BC, NWT, Ont)
Nearctopsylla brooksi (Alta, BC)
N. hyrtaci (Alta, BC)
Neopsylla inopina (Alta, BC, Sask)
Opisocrostis labis (Alta, Sask)
Orchopeas caedens durus (Alta, BC, Man, Que, YT)
O. sexdentatus agilis (Alta)
Oropsylla idahoensis (Alta)
O. labis (Alta)
O. rupestris (Alta, Man, Sask)
Rhadinopsylla fraterna (Alta, BC, Sask)
Thrassis b. bacchi (Alta, Man, Sask)
Trichopsylla abantis (Alta)

Mustela frenata nevadensis Hall
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)
Ixodes kingi (BC, Sask)
UNIRAMIA
SIPHONAPTERA
Megabothris lucifer (Alta, BC, Man, Sask)
Nearctopsylla brooksi (Alta, BC, YT)
Orchopeas caedens durus (BC)
O. sexdentatus agilis (Alta, BC, YT)

SIPHUNCULATA
Neohaematopinus marmotae (BC)

Mustela frenata novaboracensis (Emmons)
UNIRAMIA
SIPHONAPTERA
Nearctopsylla g. genalis (NB, Nfld, Ont, Que)
Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)

Mustela frenata oribasus (Bangs)
UNIRAMIA
MALLOPHAGA
Trichodectes minutus (BC)
SIPHONAPTERA
Megabothris abantis (Alta, BC, YT)
Nearctopsylla brooksi (Alta, BC, YT)
Oropsylla idahoensis (Alta,BC)

Mustela nivalis rixosa (Bangs) Least weasel
Syn.: *Mustela rixosa* (Bangs)
Mustela rixosa rixosa (Bangs)
UNIRAMIA
MALLOPHAGA
Stachiella kingi (BC)
SIPHONAPTERA
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)
Megabothris calcarifer gregsoni (NWT, YT)

Mustela putorius L. Ferret
CHELICERATA
ACARI
Dermacentor andersoni (Alta,BC)

Mustela vison Schreber Mink
CHELICERATA
ACARI
Ixodes cookei (NS, Ont, Que)
I. pacificus (BC)
I. texanus (Ont)
UNIRAMIA
SIPHONAPTERA
Megabothris atrox (Alta, Man, Ont)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla brooksi (Alta, BC, YT)
N. hyrtaci (BC)
Orchopeas caedens durus (Ont)
Trichopsylloides oregonensis (BC)

Mustela vison energumenos (Bangs)
UNIRAMIA
MALLOPHAGA
Trichodectes ermineae (BC)
SIPHONAPTERA
Dolichopsyllus stylosus (BC)
Hystrichopsylla d. dippiei (BC)
H. schefferi (BC)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla brooksi (Alta, BC, YT)
N. hyrtaci (Alta, BC)
Orchopeas nepos (BC)
O. sexdentatus agilis (Alta, BC, YT)
Thrassis acamantis (BC)
Trichopsylloides oregonensis (BC)

Mustela vison vison Schreber
CHELICERATA
ACARI
Ixodes cookei (NS)

Mustela spp.
UNIRAMIA
SIPHONAPTERA
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT, Que, YT)
Ctenophthalmus p. pseudagyrtes (NB)
Ctenopsyllus hamifer (Alta)
Epitedia scapani (BC)
E. w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Foxella ignota albertensis (Alta)
F. i. recula (BC)
Malaraeus telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
M. a. asio (Alta, NB, Nfld, NS, Ont, PEI, Que)
M. a. megacolpus (Alta, Man)
M. atrox (Alta, Man, Ont)
M. groenlandicus (NWT, YT)
Megarthroglossus divisus exsecatus (BC)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla brooksi (Alta, BC, YT)
N. g. genalis (NB, Ont)
N. g. hygini (Alta, Man, Sask)
N. hyrtaci (Alta, BC)
Neopsylla inopina (Alta, BC, Sask)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Oropsylla idahoensis (Alta, BC, YT)
O. rupestris (Alta, Sask)
Peromyscopsylla h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)
Rhadinopsylla difficilis (BC)
R. fraterna (Alta, BC, Sask)
R. media (Alta, Que)
Trichopsylla a. asio (Alta)
T. atrox (Alta)

Spilogale putorius Merriam Spotted skunk
UNIRAMIA
SIPHONAPTERA
Orchopeas nepos (BC)
O. sexdentatus agilis (BC)

Spilogale putorius gracilis Merriam
Syn.: *Spilogale gracilis latifrons* Merriam
Spilogale gracilis olympica of Holland (1949).
UNIRAMIA
MALLOPHAGA
Trichodectes osborni (BC)
SIPHONAPTERA
Atyphloceras m. multidentatus (BC)

Hystrichopsylla d. dippiei (BC)
H. schefferi (BC)
Megarthroglossus p. procus (BC)
Monopsyllus ciliatus protinus (BC)
Rhadinopsylla sectilis goodi (BC)

Spilogale putorius latifrons Merriam
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)

Spilogale putorius phenax Merriam
Syn.: *Spilogale phenax* Merriam
UNIRAMIA
SIPHONAPTERA
Ctenocephalides canis (BC, Ont)
Monopsyllus ciliatus protinus (BC)

Spilogale spp.
UNIRAMIA
SIPHONAPTERA
Ctenocephalides felis felis (BC)
Megarthroglossus p. procus (BC)

Taxidea taxus (Schreber) Badger
CHELICERATA
ACARI
Ixodes kingi (Alta)
UNIRAMIA
SIPHONAPTERA
Opiscrostis bruneri (Alta, Man, Sask, unspecified)
Oropsylla rupestris (Alta)
Pulex irritans (Alta,Man,Sask)

Taxidea taxus taxus (Schreber)
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)
UNIRAMIA
SIPHONAPTERA
Opisocrostis labis (Alta, Sask)
Oropsylla arctomys (Alta, BC, Man, NB, Ont, Que, Sask)

MUSTELIDAE OF UNDETERMINED SPECIES

Marten
UNIRAMIA
SIPHONAPTERA
Megabothris atrox (Alta, Man, Ont)
Nearctopsylla brooksi (Alta,BC,YT)

Mink
CHELICERATA
ACARI
Ixodes texanus (BC)
UNIRAMIA
SIPHONAPTERA
Megabothris atrox (Alta, Man, Ont)

Mustelidae gen. spp.
CHELICERATA
ACARI
Ixodes texanus (BC)
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Pine marten
UNIRAMIA
SIPHONAPTERA
Orchopeas c. caedens (Alta, BC, Man, Que, YT)

Short-tailed weasel
UNIRAMIA
SIPHONAPTERA
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

Skunk
UNIRAMIA
SIPHONAPTERA
Orchopeas sexdentatus agilis (Alta, BC, YT)
Thrassis acamantis (Alta, BC)

Weasel
CHELICERATA
ACARI
Dermacentor andersoni (Alta)
Ixodes hexagonus (BC)
I. marxi (BC)
I. texanus (BC)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT)
Epitedia scapani (BC)
Foxella ignota albertensis (Alta)
F. i. ignota (Man)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
Megarthroglossus divisus execatus (BC)
Monopsyllus ciliatus protinus (BC)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. w. wagneri (Alta, BC)
Nearctopsylla brooksi (Alta, BC, YT)
N. g. genalis (NB, Nfld, Ont, Que)
N. hyrtaci (Alta, BC)
Neopsylla inopina (Alta, BC, Sask)
Opisodasys k. keeni (Alta, BC)
O. vesperalis (BC)
Orchopeas c. caedens (Alta, BC, Man, NWT, Que, Sask, YT)
O. c. durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. nepos (BC)
O. sexdentatus agilis (Alta, BC, YT)
Oropsylla rupestris (Alta, Man, Sask, YT)
Thrassis acamantis (Alta, BC)
T. b. bacchi (Alta, Man, Sask)

Family PROCYONIDAE

Procyon lotor (L.) Raccoon
CHELICERATA
ACARI
Dermacentor variabilis (NS)
Hirstionyssus sp. (NS)
Ixodes cookei (NS)
I. texanus (BC, Ont)
UNIRAMIA
SIPHONAPTERA
Chaetopsylla lotoris (Ont)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask,YT)

Procyon lotor vancouverensis Nelson and Goldman
UNIRAMIA
MALLOPHAGA
Trichodectes octomaculatus (BC)

Procyon spp.
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)

Family URSIDAE

Ursus americanus Pallas Black bear
CHELICERATA
ACARI
Dermacentor variabilis (NS)
UNIRAMIA
MALLOPHAGA
Trichodectes pinquis euarctidos (BC, Ont)
SIPHONAPTERA
Chaetopsylla setosa (BC)
C. tuberculaticeps (Alta)
Oropsylla arctomys (Ont)

Ursus americanus americanus Pallas
CHELICERATA
ACARI
Dermacentor variabilis (NS)

Ursus americanus cinnamomum Audubon and Bachman
UNIRAMIA
MALLOPHAGA
Trichodectes pinguis euarctidos (BC)

Ursus arctos L. Grizzly bear
Syn.: *Ursus horribilis* Ord
CHELICERATA
ACARI
Dermacentor andersoni (BC)
UNIRAMIA
SIPHONAPTERA
Chaetopsylla setosa (BC)
C. tuberculaticeps (Alta, BC)

Ursus spp.
CHELICERATA
ACARI
Dermacentor andersoni (Alta,BC)

URSIDAE OF UNDETERMINED SPECIES

Bears
CHELICERATA
ACARI
Dermacentor andersoni (Alta)
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (Alta, BC, Man, NB, Ont, Que, ask)

ORDER CHIROPTERA

Family MOLOSSIDAE

Eumops perotis californicus (Merriam) Greater mastiff bat
CHELICERATA
ACARI
Ornithodoros spp. (BC)
UNIRAMIA
DIPTERA
Basilia spp. (BC)

Family VESPERTILIONIDAE

Eptesicus fuscus (Palisot de Beauvois) Big brown bat
CHELICERATA
ACARI
Spinturnix spp. (Ont)
UNIRAMIA
HEMIPTERA
Cimex pilosellus (BC)
SIPHONAPTERA
Myodopsylla insignis (Ont, Que)
M. palposa (BC)

Eptesicus fuscus fuscus (Palisot de Beauvois)
Syn.: *Vespertilio fuscus* Palisot de Beauvois
UNIRAMIA
HEMIPTERA
Cimex pilosellus (BC)
SIPHONAPTERA
Myodopsylla insignis (Alta, NS, Ont, Que, YT)
M. palposa (BC)

Eptesicus fuscus pallidus Young
UNIRAMIA
HEMIPTERA
Cimex pilosellus (BC)
SIPHONAPTERA
Myodopsylla insignis (Alta, BC, Ont, Sask)

Lasionycteris noctivagans (Le Conte) Silver-haired bat
UNIRAMIA
HEMIPTERA
Cimex pilosellus (BC, Ont)
SIPHONAPTERA
Nycteridopsylla vancouverensis (BC)

Myotis keenii septentrionalis (Trovessart) Keen's bat
UNIRAMIA

SIPHONAPTERA
Myodopsylla insignis (Alta, BC, Ont, Sask)

Myotis lucifugus (Le Conte) Little brown bat
CHELICERATA
ACARI
Macronyssus crosbyi (PEI)
Pygmephorus makunkai (PEI)
Spinturnix americanus (PEI)
S. globosus (Alta)
UNIRAMIA
DIPTERA
Basilia forcipata (BC)
HEMIPTERA
Cimex pilasellus (BC)
SIPHONAPTERA
Myodopsylla gentilis (BC)
M. insignis (Alta, BC, NB, Ont, PEI, Que, Sask, YT)

Myotis lucifugus alascensis Miller
UNIRAMIA
SIPHONAPTERA
Myodopsylla gentilis (BC)

Myotis lucifugus lucifugus (Le Conte)
CHELICERATA
ACARI
Liponyssus occidentalis (Ont)
Spinturnix spp. (Ont)
Steatonyssus occidentalis (Ont)
UNIRAMIA
HEMIPTERA
Cimex pilosellus (Ont)
SIPHONAPTERA
Myodopsylla gentilis (BC)
M. insignis (Man, Nfld, Ont)

Myotis lucifugus pernox Hollister
UNIRAMIA
SIPHONAPTERA
Myodopsylla insignis (Alta, NS, Ont, Que, YT)

Myotis yumanensis saturatus Miller Yuma bat
UNIRAMIA
SIPHONAPTERA
Myodopsylla gentilis (BC)

Myotis spp.
CHELICERATA
ACARI
Macronyssus crosbyi (NS)
Spinturnix sp. (NS)
UNIRAMIA
SIPHONAPTERA
Myodopsylla gentilis (BC)
M. insignis (Alta, BC, Man, NB, NS, Ont, Que, Sask, YT)

CHIROPTERA OF UNDETERMINED SPECIES

Bat
CHELICERATA
ACARI
Liponyssus occidentalis (BC)
Liponyssus spp. (BC)
Ornithodoros kelleyi (Alta, Sask)
Ornithodoros spp. (unspecified)
Spinturnix spp. (BC)
UNIRAMIA
DIPTERA
Basilia forcipata (BC)
Trichobius spp. (BC)
SIPHONAPTERA
Myodopsylla gentilis (BC)
M. insignis (Alta, NS, Ont, Que, YT)
M. palposa (BC)

Brown bat
UNIRAMIA
SIPHONAPTERA
Myodopsylla insignis (Alta, BC, Ont, Sask)
M. palposa (BC)

Little brown bat
CHELICERATA
ACARI
Myobia caudata (Ont)
UNIRAMIA
DIPTERA
Basilia forcipata (unspecified)
HEMIPTERA
Cimex pilosellus (BC)

Silver-haired bat
UNIRAMIA
HEMIPTERA
Cimex pilosellus (BC)

ORDER INSECTIVORA

FAMILY SORICIDAE

Blarina brevicauda (Say) Short-tailed shrew
CHELICERATA
ACARI
Amorphacarus hengererorum (NB)
Androlaelaps fahrenholzi (NB, Ont)
Androlaelaps sp. (NB)
Bakerdania spp. (NB)
Blarinobia simplex (NB, Ont)
Comatacarus americanus (Ont)
Cyrtolaelaps spp. (NB)
Echinonyssus blarinae (NB)
E. isabellinus (NB)
E. talpae (NB)
Euhaemogamasus liponyssoides (Ont)
Eulaelaps stabularis (NB, NS, Ont)
Euryparasitus spp. (NB)
Euschoengastia blarinae (Ont)
Haemogamasus ambulans (NB, Ont)
H. liponyssoides (NB, Ont)
H. longitarsus (Ont)

Haemagamasus sp. (NS)
Haemolaelaps glasgowi (Ont)
Hirstionyssus talpae (NS)
Hirstionyssus spp. (NS, Ont)
Ixodes angustus (NB, NS, Ont)
I. muris (NS)
Laelaps kochi (Ont)
Listrophorus spp. (Ont)
Miyatrombicula esoensis (NB)
Myobia simplex (Ont)
Myobiidae gen. spp. (Ont)
Myocoptes spp. (Ont)
Myonyssus jamesoni (Ont)
Neotrombicula microti (NS)
Orycteroxenus soricis (NB)
Protomyobia americana (NB)
P. claparedei (Ont)
Pygmephorus horridus (NB)
P. johnstoni (NB)
P. lutterloughae (NB)
P. moreohorridus (NB)
P. nidicolus (NB)
P. whitakeri (NB)
Pygmephorus spp. (NB)
Trombicula jamesoni (Ont)
Xenoryctes latiporus (NB)
UNIRAMIA
COLEOPTERA
Leptinus americanus (Ont)
SIPHONAPTERA
Atyphloceras bishopi (Ont)
Catallagia borealis (Alta, Ont)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ctenophthalmus p. pseudagyrtes (Alta, Man, NB, NS, Ont, PEI, Que, Sask)
Doratopsylla blarinae (BC, NB, NS, Ont, Que)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla tahavuana (NB, Ont)
Megabothris a. asio (Ont)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla genalis (Ont)
N. g. genalis (NB, Nfld, Ont, Que)
N. g. hygini (Alta, Man, Sask)
Nosopsyllus fasciatus (BC, Man, Nfld, NS, Ont, Que)
Orchopeas leucopus (Ont)
Stenoponia americana (Man, NS, Ont, Que)
SIPHUNCULATA
Hoplopleura acanthopus (Ont)

Blarina brevicauda angusta Anderson
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (NB)
Ctenophthalmus p. pseudagyrtes (NB)
Peromyscopsylla catatina (NB)

Blarina brevicauda manitobensis Anderson
UNIRAMIA
SIPHONAPTERA
Ceratophyllus wagneri systaltus (Man)
Corrodopsylla c. curvata (Man)
Doratopsylla blarinae (Man)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Man)
Monopsyllus wagneri systaltus (Man)
Nearctopsylla genalis hygini (Alta, Man, Sask)
Peromyscopsylla catatina (Man)
Stenoponia americana (Man)

Blarina brevicauda pallida Smith
CHELICERATA
ACARI
Dermacentor variabilis (NS)
Ixodes angustus (NS)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (NS)

Blarina brevicauda talpoides (Gapper)
UNIRAMIA
SIPHONAPTERA
Atyphloceras bishopi (Ont)
Corrodopsylla c. curvata (BC, Ont, Sask)
Ctenophthalmus p. pseudagyrtes (Alta, Man, NB, NS, Ont, PEI, Que, Sask)
Doratopsylla blarinae (NB, NS, Ont, Que)
Hystricopsyllus gigas tahavauna (Ont)
H. tahavauna (Ont)
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Sask, Que, YT)
Stenoponia americana (Man, NS, Ont, Que)

Blarina spp.
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ctenophthalmus p. pseudagyrtes (Alta, Man, NB, NS, Ont, PEI, Que, Sask)
Doratopsylla blarinae (NB, NS, Ont, Que)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)
Nearctopsylla g. genalis (NB, Nfld, Ont, Que)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

Microsorex hoyi (Baird) Pygmy shrew
CHELICERATA
ACARI
Amorphacarus hengererorum (NB)
Bakerdania sp. (NB)
Cyrtolaelaps sp. (NB)
Echinonyssus talpae (NB)
Haemogamasus ambulans (NB)
Ixodes angustus (NB)
Miyatrombicula esoensis (NB)
Orycteroxenus canadensis (NB)

O. soricis (NB)
Protomyobia americana (NB)
Pygmephorus horridus (NB)
P. moreohorridus (NB)
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Microsorex hoyi hoyi Elliot
UNIRAMIA
SIPHONAPTERA
Stenoponia americana (Man, NS, Ont, Que)

Microsorex spp.
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Sorex arcticus Kerr Arctic shrew
CHELICERATA
ACARI
Ixodes muris (NB)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus wagneri systaltus (Man)
Corrodopsylla c. curvata (Man)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)
Nearctopsylla g. genalis (NB)
N. g. hygini (Alta, Man, Sask)

Sorex arcticus arcticus Kerr
Syn.: *Sorex richardsonii* Bachman
UNIRAMIA
SIPHONAPTERA
Nearctopsylla genalis hygini (Alta, Man, Sask)
N. hyrtaci (Alta, BC)

Sorex arcticus laricorum Jackson
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Sorex cinereus Kerr Masked shrew
CHELICERATA
ACARI
Amorphacarus hengererorum (NB)
Bakerdania sp. (NB)
Cyrtolaelaps sp. (NB)
Echinonyssus talpae (NB)
Eulaelaps stabularis (NS, Sask)
Euryparasitus sp. (NB)
Euschoengastia blarinae (Ont)
Glycephagidae gen. sp. (Ont)
Haemogamasus liponyssoides (NB)
Haemogamasus sp. (NS)
Ixodes angustus (NB)
I. marxi (PEI)
I. muris (PEI)
I. spinipalpis (Alta)
Miyatrombicula esoensis (NB)
Myobia sp. (NS)
Myobiidae gen. spp. (Ont)
Neotrombicula harperi (NB)
Orycteroxenus soricis (NB)
Protomyobia claparedei (NB)
Psorergates cinereus (Man, Ont)
Pygmephorus horridus (NB)
P. moreohorridus (NB)
P. whitakeri (NB)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus wagneri systaltus (Man)
Corrodopsylla curvata (Ont)
C. c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
C. hamiltoni (NB)
Ctenophthalmus p. pseudagyrtes (Alta, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, NS, NWT, Ont, Que, Sask, YT)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)
Nearctopsylla g. genalis (NB, Nfld, Ont, Que)
N. g. laurentina (NB)
N. hyrtaci (BC)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
Peromyscopsylla catatina (Man, Nfld, NS, Ont)
P. h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Sask)
SIPHUNCULATA
Hoplopleura hesperomydis (Ont)

Sorex cinereus acadicus Gilpin
CHELICERATA
ACARI
Ixodes angustus (NS)
I. muris (NS)
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (NS)

Sorex cinereus cinereus Kerr
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Epitedia w. wenmanni (Man)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas leucopus (Man)
Peromyscopsylla catatina (Man)
SIPHUNCULATA
Hoplopleura acanthopus (Ont)

Sorex cinereus haydeni Baird
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (BC, Ont, Sask)

Sorex cinereus miscix Bangs
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (Que)
Nearctopsylla g. genalis (NB, Nfld, Ont, Que)

Sorex fumeus Miller Smoky shrew
CHELICERATA
ACARI
Amorphacarus hengererorum (NB)
Androlaelaps fahrenholzi (NB)
Bakerdania sp. (NB)
Cyrtolaelaps sp. (NB)
Echinonyssus talpae (NB)
Epitedia wenmanni (NB)
Euryparasitus sp. (NB)
Euschoengastia blarinae (Ont)
Glycyphagus hypudaei (NB)
Haemogamasus ambulans (NB)
H. liponyssoides (NB)
Ixodes angustus (NB, NS)
Miyatrombicula esoensis (NB)
Myonyssus jamesoni (Ont)
Orycteroxenus soricis (NB)
Protomyobia brevisetosa (NB)
Pygmephorus horridus (NB)
P. moreohorridus (NB)
P. whitakeri (NB)
Pygmephorus sp. (NB)
Xenoryctes nudus (NB)
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ctenophthalmus p. pseudagyrtes (Alta, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (NB)
Nearctopsylla g. genalis (NB, Nfld, Ont, Que)

Sorex gaspensis Anthony and Goodwin
CHELICERATA
ACARI
Amorphacarus hengererorum (NB)
Bakerdania sp. (NB)
Cyrtolaelaps sp. (NB)
Echinonyssus talpae (NB)
Euryparasitus sp. (NB)
Glycyphagus hypudaei (NB)
Haemogamasus ambulans (NB)
H. liponyssoides (NB)
Ixodes angustus (NB)
Miyatrombicula esoensis (NB)
Orycteroxenus soricis (NB)
Pygmephorus horridus (NB)
P. moreohorridus (NB)
P. nidicolus (NB)
P. whitakeri (NB)

Sorex palustris Richardson Water shrew
CHELICERATA
ACARI
Amorphacarus hengererorum (NB)
Cyrtolaelaps sp. (NB)
Echinonyssus talpae (NB)
Glycephagidae gen. spp. (Ont)
Glycyphagus hypudaei (NB)
Haemogamasus ambulans (NB)
Haemogamasus spp. (NS)
Hirstionysus spp. (Ont)
Ixodes angustus (NB)
Labidophorids (Ont)
Miyatrombicula esoensis (NB)
Myonyssus jamesoni (NB)
Orycteroxenus soricis (NB)
Protomyobia claparedei (NB)
Pygmephorus horridus (NB)
P. moreohorridus (NB)
UNIRAMIA
SIPHONAPTERA
Corrodopsylla curvata (Ont)
C. c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
C. c. obtusata (BC)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
Neartopsylla hyrtaci (Alta, BC)

Sorex trowbridgii Baird Trowbridge's shrew
UNIRAMIA
SIPHONAPTERA
Hystrichopsylla o. occidentalis (BC)

Sorex trowbridgii trowbridgii Baird
UNIRAMIA
SIPHONAPTERA
Epitedia scapani (BC)

Sorex vagrans Baird Vagrant shrew
Syn.: *Sorex obscurus obscurus* of Holland (1949).
Sorex obscurus setosus of Holland (1984).
CHELICERATA
ACARI
Ixodes soricis (BC)
UNIRAMIA
SIPHONAPTERA
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Nearctopsylla hyrtaci (Alta,BC)

Sorex vagrans obscurus Merriam
Syn.: *Sorex obscurus* Merriam
UNIRAMIA
SIPHONAPTERA
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)
Hystrichopsylla o. occidentalis (BC)
Nearctopsylla hyrtaci (Alta, BC)

Sorex vagrans vagrans Baird
CHELICERATA
ACARI
Ixodes soricis (BC)

Sorex vagrans vancouverensis Merriam
UNIRAMIA
SIPHONAPTERA
Corrodopsylla curvata obtusata (BC)

Sorex spp.
CHELICERATA
ACARI
Ixodes angustus (BC)
I. soricis (BC)
COLEOPTERA
Leptinus americanus (BC)
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
C. c. obtusata (BC)
Corypsylla kohlsi (BC)
Doratopsylla blarinae (Ont)
Epitedia scapani (BC)
Hystrichopsylla d. dippiei (BC)
H. d. truncata (BC)
H. o. occidentalis (BC)
Malaraeus telchinus (BC)
Megabothris abantis (Alta, BC, YT)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
Nearctopsylla genalis hygini (Alta, Man, Sask)
N. hyrtaci (Alta, BC)
Nosopsyllus fasciatus (BC, Ont, Que, Sask)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)

SORICIDAE OF UNDETERMINED SPECIES

Shrew
CHELICERATA
ACARI
Ixodes angustus (BC)
UNIRAMIA
SIPHONAPTERA
Malaraeus telchinus (BC)

Water shrew
CHELICERATA
ACARI
Ixodes angustus (BC)

Family TALPIDAE

Condylura cristata (L.) Star-nosed mole
CHELICERATA
ACARI
Androlaelaps fahrenholzi (NB)
Cyrtolaelaps spp. (NB)
Eadiea condylurae (NB)
Echinonyssus isabellinus (NB)
Eulaelaps stabularis (NB)
Euryparasitus spp. (NB)
Glycyphagus hypudaei (NB)
Haemogamasus ambulans (NB)
H. liponyssoides (NB)
Haemogamasus spp. (NS)
Hirstionyssus sp. (NS)
Ixodes angustus (NB)
Liponyssus spp. (Ont)
Orycteroxenus canadensis (NB)
O. soricis (NB)
Pygmephorus horridus (NB)
P. lutterloughae (NB)
P. moreohorridus (NB)
Xenoryctes nudus (NB)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)
Nearctopsylla g. genalis (NB, Nfld, Ont, Que)

Condylura cristata cristata (L.)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, Man, Ont, Sask)

Condylura cristata nigra Smith
CHELICERATA
ACARI
Dermacentor variabilis (NS)
Ixodes angustus (NB)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Que)

Neurotrichus gibbsii (Baird) Shrew mole
UNIRAMIA
SIPHONAPTERA
Epitedia scapani (BC)
Hystrichopsylla o. occidentalis (BC)
Nearctopsylla jordani (BC)

Neurotrichus gibbsii gibbsii (Baird)
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
Corrodopsylla curvata obtusata (BC)
Corypsylla jordani (BC)
Epitedia scapani (BC)
Nearctopsylla jordani (BC)
N. traubi (BC)

Neurotrichus spp.
UNIRAMIA
SIPHONAPTERA
Corypsylla jordani (BC)
C. ornata (BC)
Epitedia scapani (BC)
Nearctopsylla jordani (BC)

Parascalops breweri (Bachman) Hairy-tailed mole
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, Man, NB, NS, Ont, PEI, Que, Sask)
Doratopsylla blarinae (Ont)
Hystrichopsylla tahavuana (Que)

Parascalops spp.
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

Scalopus spp. Eastern mole
UNIRAMIA
SIPHONAPTERA
Nearctopsylla g. genalis (NB,Nfld,Ont,Que)

Scapanus aquaticus (L.) Western mole
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, Man, NB, NS, Ont, PEI, Que, Sask)

Scapanus latimanus (Bachman) Broad-footed mole
CHELICERATA
ACARI
Ixodes pacificus (BC)

Scapanus orarius True Coast mole
UNIRAMIA
SIPHONAPTERA
Epitedia scapani (BC)

Scapanus orarius orarius True
UNIRAMIA
SIPHONAPTERA
Epitedia scapani (BC)

Scapanus orarius schefferi Jackson
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
C. s. sculleni (BC)
Corypsylla ornata (BC)
Epitedia scapani (BC)
Haemogamasus liponyssoides (BC)
Hystrichopsylla o. occidentalis (BC)
Nearctopsylla jordani (BC)
N. traubi (BC)

Scapanus townsendii (Bachman) Townsend's mole
UNIRAMIA
SIPHONAPTERA
Corypsylla ornata (BC)
Epitedia scapani (BC)
Nearctopsylla traubi (BC)

Scapanus spp.
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
Corypsylla ornata (BC)
Hystrichopsylla o. occidentalis (BC)
Nearctopsylla jordani (BC)

TALPIDAE OF UNDETERMINED SPECIES

Mole
CHELICERATA
ACARI
Haemogamasus liponyssoides (BC)
UNIRAMIA
SIPHONAPTERA
Corypsylla ornata (BC)
Epitedia scapani (BC)

ORDER LAGOMORPHA

Family LEPORIDAE

Lepus americanus Erxleben Snowshoe rabbit
CHELICERATA
ACARI
Cheyletiella parasitivorax (Ont)
Dermacentor variabilis (NS)
Haemaphysalis leporis-palustris (Alta, Man, NB, NS, Ont, PEI, Sask)
Ixodes spinipalpus (BC)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus vison (Ont)
Megabothris abantis (Alta, BC, YT)
Monopsyllus vison (Ont)

Lepus americanus bairdii Hayden
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (Alta, BC, NB, NWT)

Lepus americanus columbiensis Rhoads
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (Alta, BC, NB, NWT)
Opisodasys vesperalis (BC)
Orchopeas sexdentatus agilis (Alta, BC, YT)

Lepus americanus dalli Merriam
Syn.: *Lepus americanus macfarlani* Merriam
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Euhoplopsyllus glacialis lynx (Alta, BC, NWT, YT)
Megabothris calcarifer gregsoni (NWT, YT)

Lepus americanus struthopus Bangs
CHELICERATA
ACARI
Haemaphysalis leporis-palustris (NS)
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (NB)

Lepus americanus virginianus Harlan
CHELICERATA
ACARI
Haemaphysalis leporis-palustris (Alta, Man, NB, NS, Ont, PEI, Sask)
Neotrombicula basignata (NS)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus vison (Ont)

Megabothris abantis (Alta, BC, YT)
Monopsyllus ciliatus protinus (BC)
M. vison (Ont)

Lepus arcticus Ross Arctic hare
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus g. glacialis (NWT)

Lepus arcticus arcticus Ross
Syn.: *Lepus glacialis* Leach
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus g. glacialis (NWT)

Lepus capensis L. Cape hare
Syn.: *Lepus europaeus* Pallas
CHELICERATA
ACARI
Haemaphysallis leporis-palustris (Ont)
UNIRAMIA
SIPHONAPTERA
Cediopsylla simplex (Ont)
SIPHUNCULATA
Haemodipsus spp. (Ont)

Lepus capensis hybridus Desmarest
CHELICERATA
ACARI
Haemaphysalis leporis-palustris (Ont)
UNIRAMIA
SIPHONAPTERA
Cediopsylla simplex (Ont)
SIPHUNCULATA
Haemodipsus ventricosus (Ont)
Haemodipsus spp. (Ont)

Lepus townsendii Bachman White-tailed jack rabbit
CHELICERATA
ACARI
Haemaphysalis leporis-palustris (Alta)
UNIRAMIA
SIPHONAPTERA
Pulex irritans (Man, Sask)

Lepus townsendii campanius Hollister
Syn.: *Lepus campestris* Bachman
CHELICERATA
ACARI
Dermacentor andersoni (Alta)
UNIRAMIA
SIPHONAPTERA
Oropsylla rupestris (Alta, Man, Sask)
Pulex irritans (Alta, Man, PEI)

Lepus spp.
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Cediopsylla i. inaequalis (Alta)
Euhoplopsyllus glacialis affinis (Sask)
E. g. lynx (Alta, BC, NWT, YT)
Hoplopsyllus spp. (Alta)
Hystrichopsylla d. dippiei (Alta)
Hystrichopsylla gigas dippiei (Alta)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Opisocrostis t. tuberculatus (Alta)
Pulex irritans (Alta, Man)

Sylvilagus floridanus (Allen) Eastern cottontail
UNIRAMIA
SIPHONAPTERA
Cediopsylla simplex (Ont)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Euhoplopsyllus glacialis affinis (Sask)
Monopsyllus ciliatus protinus (BC)

Sylvilagus floridanus mearnsii Allen
UNIRAMIA
DIPTERA
Cuterebra spp. (Ont)
SIPHONAPTERA
Cediopsylla simplex (Ont)
Tamiophila grandis (Ont)

Sylvilagus nuttalii (Bachman) Nuttall's cottontail
UNIRAMIA
SIPHONAPTERA
Cediopsylla i. inaequalis (Alta)

Sylvilagus nuttalii grangeri (Allen)
UNIRAMIA
SIPHONAPTERA
Cediopsylla i. inaequalis (Alta, Sask)
Megabothris quirini (Alta, BC, NWT, Ont)
Odontopsyllus dentatus (Alta, Sask)

Sylvilagus nuttallii nuttallii (Bachman)
UNIRAMIA
SIPHONAPTERA
Orchopeas sexdentatus agilis (BC)

Sylvilagus spp.
UNIRAMIA
SIPHONAPTERA
Cediopsylla i. inaequalis (Alta, Sask)
Odontopsyllus dentatus (Alta, Sask)
O. multispinosus (Alta)

LEPORIDAE OF UNDETERMINED SPECIES

Bush rabbit
UNIRAMIA
SIPHONAPTERA
Euhoplopsyllus glacialis lynx (Alta, BC, NB, NWT, YT)
Opisocrostis bruneri (unspecified)

Cottontail rabbit
UNIRAMIA
SIPHONAPTERA
Cediopsylla simplex (Ont)
Tamiophila grandis (Ont)

Hare
CHELICERATA
ACARI
Haemaphysalis leporis-palustris (BC)
UNIRAMIA
SIPHONAPTERA
Euhoplopsylla glacialis lynx (Alta, BC, NB, NWT)

Jack rabbit
CHELICERATA
ACARI
Otobius megnini (Alta)

Rabbit
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC, Ont)
Haemaphysalis cinnabarina (BC)
H. leporis-palustris (BC, NB, NS, Que, Sask)
Ixodes angustus (BC)
I. dentatus spinipalpus (BC)
I. spinipalpus (BC)
Otobius megnini (Alta)
UNIRAMIA
DIPTERA
Cuterebra sp. (Ont)
SIPHONAPTERA
Euhoplopsylla glacialis lynx (Alta, BC, NWT, YT)
Monopsyllus w. wagneri (Alta, BC)

Lab rabbit
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)
UNIRAMIA
SIPHUNCULATA
Haemodipsus ventricosus (BC)
Snowshoe hare
CHELICERATA
ACARI
Haemaphysalis leporis-palustris

Leporidae gen. spp.
CHELICERATA
ACARI
Dermacentor variabilis (NS)

Family OCHOTONIDAE

Ochotona collaris (Nelson) Collared pika
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Ctenophyllus armatus (Alta, BC, YT)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus tolli (YT)
Opisocrostis t. tuberculatus (Alta, BC, Sask, YT)
Oropsylla idahoensis (Alta, BC, YT)

Ochotona princeps (Richardson) Pika
CHELICERATA
ACARI
Ixodes angustus (BC)
I. dentatus spinipalpus (BC)
I. ochotonae (BC)
UNIRAMIA
SIPHONAPTERA
Amphalius runatus necopinus (Alta, BC)
Catallagia decipiens (Alta, BC, Sask)
Ctenophyllus armatus (Alta, BC, YT)
Megabothris abantis (Alta, BC)
Megarthroglossus spenceri (BC)
Monopsyllus ciliatus protinus (BC)
Orchopeas sexdentatus agilis (Alta, BC, YT)
Oropsylla idahoensis (Alta, BC, YT)
Peromyscopsylla ravalliensis (BC)
Rhadinopsylla difficilis (BC)
R. fraterna (BC)

Ochotona princeps brooksi Howell
CHELICERATA
ACARI
Ixodes ochotonae (BC)
UNIRAMIA
SIPHONAPTERA
Ctenophyllus armatus (Alta, BC, YT)
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
Orchopeas sexdentatus agilis (Alta, BC, YT)
Rhadinopsylla difficilis (BC)

Ochotona princeps brunnescens Howell
CHELICERATA
ACARI
Ixodes ochotonae (BC)

Ochotona princeps cuppes Bangs
UNIRAMIA
SIPHONAPTERA
Ctenophyllus armatus (Alta, BC)

Ochotona princeps fenisex Osgood
UNIRAMIA
SIPHONAPTERA
Ctenophyllus armatus (Alta, BC)
Monopsyllus eumolpi (Alta, BC, Ont, Sask)
SIPHUNCULATA
Hoplopleura acanthopus (BC)

Ochotona princeps princeps (Richardson)
UNIRAMIA
SIPHONAPTERA
Ctenophyllus armatus (Alta, BC)
Megabothris abantis (Alta, BC)
Oropsylla idahoensis (Alta, BC)

Ochotona spp.
CHELICERATA
ACARI
Ixodes angustus (BC)
I. spinipalpus (BC)

UNIRAMIA
SIPHONAPTERA
Amphalius runatus necopinus (Alta)
Catallagia decipiens (Alta, BC, YT)
Ctenophyllus armatus (Alta, BC, YT)
Euhoplopsylla glacialis lynx (Alta, BC, NWT, YT)
Megabothris abantis (Alta, BC, YT)
Monopsyllus ciliatus protinus (BC)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
Orchopeas sexdentatus agilis (Alta, BC, YT)

ORDER RODENTIA

Family APLODONTIDAE

Aplodontia rufa Merriam Mountain beaver
UNIRAMIA
SIPHONAPTERA
Dolichopsyllus stylosus (BC)

Aplodontia rufa pacifica Merriam
Syn.: *Aplodontia pacifica* Merriam
CHELICERATA
COLEOPTERA
Leptinillus aplodontiae (BC)

Aplodontia rufa rufa (Rafinesque)
UNIRAMIA
SIPHONAPTERA
Dolichopsyllus stylosus (BC)
Epitedia scapani (BC)

Aplodontia spp.
CHELICERATA
COLEOPTERA
Leptinillus aplodontiae (BC)

Family CASTORIDAE

Castor canadensis Kuhl Beaver
CHELICERATA
ACARI
Ixodes cookei (Ont)
Prolabidocarpus canadensis (Ont)
Psorobia castoris (Ont)
COLEOPTERA
Leptinillus validus (BC, Hudson Bay Area, Ont, Que)
Platypsyllus castoris (BC, Ont)

CASTORIDAE OF UNDETERMINED SPECIES

Beaver
CHELICERATA
COLEOPTERA
Leptinillus validus (BC)
Platypsyllus castoris (BC, Ont)

Family CAVIIDAE

Guinea pig
CHELICERATA
ACARI
Dermacentor andersoni (BC)
Ixodes pacificus (BC)

FAMILY ERETHIZONTIDAE

Erethizon dorsatum (L.) Porcupine
CHELICERATA
ACARI
Dermacentor variabilis (NS)
Ixodes cookei (NS)
UNIRAMIA
MALLOPHAGA
Eutrichophilus setosus (NS, Ont)
SIPHONAPTERA
Ceratophyllus adjustus (BC)
Chaetopsylla setosa (BC)

Erithizon dorsatum dorsatum (L.)
CHELICERATA
ACARI
Ixodes cookei (NS)

Erethizon dorsatum epixanthium Brandt
CHELICERATA
ACARI
Dermacentor andersoni (Alta)

Erithizon dorsatum nigrescens Allen
CHELICERATA
ACARI
Dermacentor andersoni (BC)
Ixodes spp. (BC)
UNIRAMIA
MALLOPHAGA
Eutrichophilus setosus (Alta, BC)

Erethizon sp.
CHELICERATA
ACARI
Dermacentor andersoni (BC)

Family GEOMYIDAE

Geomys sp.
UNIRAMIA
SIPHONAPTERA
Dactylopstlla ignota albertensis (Alta)

Thomomys talpoides (Richardson) Northern pocket gopher
Syn.: *Thomomys fuscus*
Thomomys fuscus fuscus
UNIRAMIA
MALLOPHAGA
Geomydoecus sp. (Sask)

SIPHONAPTERA
Dactylopsylla comis (BC)
D. rara (Alta, Sask)
Foxella ignota albertensis (Alta, Sask)
F. i. recula (BC)
Hystrichopsylla d. dippiei (Alta)
H. gigas dippiei (Alta)
Monopsyllus w. wagneri (Alta, BC)

Thomomys talpoides andersoni Goldman
UNIRAMIA
SIPHONAPTERA
Oropsylla idahoensis (Alta, BC)

Thomomys talpoides fuscus Merriam
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Foxella ignota albertensis (Alta)
SIPHUNCULATA
Hoplopleura acanthopus (BC)

Thomomys talpoides incensus Goldman
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Sask)
Foxella ignota recula (BC)

Thomomys spp.
UNIRAMIA
SIPHONAPTERA
Foxella ignota albertensis (Alta, Sask)
F. i. recula (BC)
Megabothris abantis (Alta, BC, YT)
Oropsylla idahoensis (Alta, BC, YT)
O. rupestris (Alta)
Rhadinopsylla fraterna (Alta, BC, Sask)
Thrassis petiolatus (BC)

Family HETEROMYIDAE

Dipodomys ordii Woodhouse — Ord's kangaroo mouse
UNIRAMIA
SIPHONAPTERA
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)

Dipodomys ordii terrasus Hoffmeister
UNIRAMIA
SIPHONAPTERA
Meringis parkeri (Sask)

Perognathus parvus laingi Anderson — Great basin pocket mouse
UNIRAMIA
SIPHUNCULATA
Fahrenholzia pinnata (BC)

Perognathus parvus lordi (Gray)
Syn.: *Perognathus l. lordi* (Gray)
UNIRAMIA
SIPHONAPTERA
Meringis shannoni (BC)
SIPHUNCULATA
Fahrenholzia pinnata (BC)

Family MURIDAE

Clethrionomys gapperi (Vigors) — Gapper's red-backed mouse
Syn.: *Evotomys gapperi* (Bailey)
Evotomys saturatus of Holland (1984).
CHELICERATA
ACARI
Androlaelaps fahrenholzi (NB)
Androlaelaps sp. (NS)
Cyrtolaelaps sp. (NB)
Dermacarus hypudaei septentrionalis (Que)
D. variabilis (Man, NS)
Echinonyssus isabellinus (NB)
Echinonyssus sp. (NB)
Eulaelaps stabularis (NB, NS)
Euschoengastia blarinae (NB)
Euschoengastia sp. (NS)
Glycyphagidae gen. spp. (Ont)
Glycyphagus hypudaei (NB)
Haemaphysalis leporis-palustris (NS)
Haemogamasus ambulans (NB, NS)
H. reidi (NB)
Haemogamasus spp. (NS)
Haemolaelaps glasgowi (Ont)
Hirstionyssus sp. (NS)
Hyperlaelaps sp. (NS)
Ixodes angustus (NB, NS)
I. muris (PEI)
Ixodes spp. (Ont)
Labidophorids (Ont)
Laelaps kochi (Ont)
Laelaps sp. (NS)
Listrophoridae gen. spp. (Ont)
Listrophorus mexicanus (NB, Que)
Macronyssus crosbyi (NS)
Miyatrombicula esoensis (NB)
Myobia spp. (Que)
Myobiidae gen. spp. (Ont)
Myocoptes j. japonensis (NB)
M. squamosus (NB)
Myocoptes spp. (Que)
Neotrombicula harperi (NB)
N. microti (NB)
Pygmephorus horridus (NB)
Radfordia lemnina (NB)
Radfordia spp. (Que)
Sarcoptidae gen. sp. (Ont)
Trichoecius tenax (NB)
Trombicula spp. (NS, Que)
Trombiculidae gen. spp. (Ont)
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (Alta, BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Atyphloceras bishopi (Man, Nfld, Ont, Que)

Catallagia borealis (Man, NB, Ont, Que)
C. charlottensis (Alta, BC)
C. dacenkoi fulleri (Alta, BC, Man, NWT, YT)
C. decipiens (Alta, BC, Man, Sask, YT)
C. jellisoni (Alta, BC, YT)
Ceratophyllus gallinae (Man)
C. wagneri systaltus (Man)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Ctenopsyllus selenis (Alta, BC)
Delotelis hollandi (Alta, BC)
D. telegoni (Alta, BC)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla d. dippiei (Man)
H. d. truncata (BC)
H. o. occidentalis (Alta, BC)
Malaraeus telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
M. asio (Ont)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. a. megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus thambus (Alta, BC, Nfld, NWT, Que, YT)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. wagneri systaltus (Alta, Man, Ont, Sask)
Nearctopsylla g. genalis (NB)
Nopsylla inopina (Alta, BC, Sask)
Opisodasys k. keeni (Alta, BC)
O. pseudarctomys (Alta, Ont)
Orchopeas caedens durus (NB)
O. leucopus (Man)
O. sexdentatus agilis (Alta, BC, YT)
Peromyscopsylla catatina (Man, NB, Nfld, NS, Ont, Que)
P. h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Sask)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla arborea (Alta, BC)
R. fraterna (BC, Sask)
R. media (Alta, Que)
Stenoponia americana (Alta, Man, NB, NS, Ont, Que)
Trichopsylla quirini (Alta)
SIPHUNCULATA
Hoplopleura acanthopus (Ont)
H. hesperomydis (Que)

Clethrionomys gapperi athabascae (Preble)
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (Alta, BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta)
Catallagia dacenkoi fulleri (Alta, BC, Man, NWT, YT)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, PEI, Que, Sask, YT)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla linta (BC, NWT, YT)

Clethrionomys gapperi cascadensis Booth
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)

Clethrionomys gapperi caurinus (Bailey)
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
Hystrichopsylla o. occidentalis (BC)

Clethrionomys gapperi gapperi (Vigors)
UNIRAMIA
SIPHONAPTERA
Megabothris quirini (Alta, BC, Nfld, NWT, Ont, Que)
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

Clethrionomys gapperi gaspeanus Anderson
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (NB)
Megabothris quirini (NB)
Peromyscopsylla catatina (NB)

Clethrionomys gapperi loringi (Bailey)
UNIRAMIA
SIPHONAPTERA
Amphipsylla sibirica pollionis (Alta)
Atyphloceras bishopi (Man)
Catallagia borealis (Man)
C. decipiens (Alta, BC)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla d. dippiei (Alta, BC, Man)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. wagneri systaltus (Alta, Man, Ont, Sask)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
Peromyscopsylla catatina (Man, Nfld, NS, Ont)
P. h. hamifer (Man)
P. selenis (Alta, Man, NWT, Sask, YT)

Scaphiopsylla bishopi (Man)
Stenoponia americana (Man, NS, Ont, Que)

Clethrionomys gapperi ochraceus (Miller)
UNIRAMIA
SIPHONAPTERA
Catallagia borealis (Man, NB, Ont, Que)
Ctenophthalmus p. pseudagyrtes (NB)
Epitedia w. wenmanni (NB)
Orchopeas leucopus (NB)
Peromyscopsylla catatina (NB)
Stenoponia americana (NB)

Clethrionomys gapperi pallescens Hall and Cockrum
CHELICERATA
ACARI
Dermacentor variabilis (NS)
Haemaphysalis leporis-palustris (NS)
Ixodes angustus (NS)

Clethrionomys gapperi proteus (Bangs)
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (Alta, BC, Man, Nfld, NWT, Que, Sask)
Atyphloceras bishopi (Nfld, Man, Ont, Que)
Catallagia borealis (Ont, Que)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla catatina (Man, Nfld, NS, Ont, Que)
P. h. hamifer (Alta, Nfld, NWT, Ont, Que)
Rhadinopsylla media (Alta, Que)

Clethrionomys gapperi saturatus (Rhoads)
Syn.: *Evotomys gapperi saturatus* Rhoads
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT)
Amphipsylla sibirica pollionis (Alta)
Catallagia charlottensis (Alta)
C. decipiens (Alta, BC, Sask)
Ctenophthalmus p. pseudagyrtes (Alta)
Delotelis telegoni (Alta)
Hystrichopsylla dippiei truncata (BC)
Malaraeus telchinus (BC)
Megabothris abantis (Alta, BC)
M. quirini (Alta, BC, NWT, Ont)
Nearctopsylla hyrtaci (BC)
Neopsylla inopina (Alta)
Orchopeas sexdentatus agilis (BC)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask)
Trichopsylla quirini (Alta)
SIPHUNCULATA
Hoplopleura acanthopus (BC)

Clethrionomys gapperi ungava (Bailey)
Syn.: *Evotomys ungava* Bailey
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (Alta, BC, Man, Nfld, NWT, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris asio (Nfld)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Clethrionomys rutilus Pallas Northern red-backed mouse
CHELICERATA
ACARI
Haemogamasus ambulans (NWT)
Hirstionyssus isabellinus (NWT)
Laelaps clethrionomydis (NWT)
Myocoptes spp. (NWT)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Catallagia dacenkoi fulleri (Alta, BC, Man, NWT, YT)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. calcifer gregsoni (NWT, YT)
M. groenlandicus (Man, Nfld, NWT, Que, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus thambus (Alta, BC, Nfld, NWT, Que, YT)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
Peromyscopsylla h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Sask)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
SIPHUNCULATA
Polyplax alaskensis (NWT)

Clethrionomys rutilus dawsoni (Merriam)
Syn.: *Clethrionomys dawsoni* (Merriam)
Clethrionomys dawsoni dawsoni (Merriam)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Catallagia dacenkoi fulleri (Alta, BC, Man, NWT, YT)
C. decipiens (Alta, BC, Man, Sask, YT)
C. jellisoni (Alta, BC, YT)
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)

C. lunatus tundrensis (NWT, Que)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla o. occidentalis (BC)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. calcarifer gregsoni (NWT, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla linta (BC, NWT, YT)

Clethrionomys spp.
CHELICERATA
ACARI
Ixodes angustus (Alta)
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Atyphloceras bishopi (Man, Nfld, Ont, Que)
Catallagia charlottensis (BC)
C. dacenkoi fulleri (Alta, BC, Man, YT)
C. decipiens (Alta, BC, Man, Sask, YT)
C. sculleni chamberlini (BC)
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que)
Delotelis hollandi (Alta, BC)
Hystrichopsylla o. occidentalis (Alta, BC)
Malaraeus euphorbi (Alta, BC, NWT, Sask)
M. telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
M. acerbus (Man, Ont)
M. asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. calcarifer gregsoni (NWT, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. wagneri systaltus (Alta, Man, Ont, Sask)
Opisodasys k. keeni (Alta, BC)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
Peromyscopsylla catatina (Man, Nfld, NS, Ont)
P. hesperomys adelpha (Alta, Sask)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla arborea (Alta, BC)
R. linta (BC, NWT, YT)
Stenoponia americana (Man, NS, Ont, Que)

Dicrostonyx groenlandicus (Traill) Collared lemming
CHELICERATA
ACARI
Haemogamasus ambulans (NWT)
Hirstionyssus isabellinus (NWT)
Laelaps alaskensis (NWT)
Pygmephorus spp. (NWT)
UNIRAMIA
SIPHONAPTERA
Megabothris calcarifer gregsoni (NWT, YT)
M. groenlandicus (NWT)
SIPHUNCULATA
Hoplopleura acanthopus (NWT)

Dicrostonyx groenlandicus kilangmiutuk Anderson and Rand
UNIRAMIA
SIPHONAPTERA
Megabothris groenlandicus (NWT)

Dicrostonyx groenlandicus richardsoni Merriam
Syn.: *Dicrostonyx torquatus richardsoni* Merriam
UNIRAMIA
SIPHONAPTERA
Ceratophyllus lunatus tundrensis (NWT, Que)
Megabothris asio megacolpus (Man)
M. groenlandicus (Man, Nfld, YT)

Dicrostonyx hudsonius (Pallas) Labrador collared lemming
UNIRAMIA
SIPHONAPTERA
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)
C. lunatus tundrensis (NWT, Que)
Megabothris asio megacolpus (Que)
M. groenlandicus (Man, Nfld, NWT, Que, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NWT, Ont, Que, Sask, YT)

Dicrostonyx spp.
CHELICERATA
ACARI
Listrophorus dicrostonyx (NWT)
Myocoptes japonensis canadensis (Ont)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT, Que, YT)
Megabothris asio megacolpus (Que)
M. calcarifer gregsoni (NWT, YT)
M. groenlandicus (Nfld, Que, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Oropsylla alaskensis (NWT, YT)

Lagurus curtatus (Cope) Sagebrush vole
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Megabothris c. clantoni (BC)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)
Peromyscopsylla hesperomys adelpha (Alta, Sask)
Rhadinopsylla fraterna (BC, Sask)

Lemmus sibiricus Kerr Brown lemming
Syn.: *Lemmus trimucronatus* (Richardson)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Megabothris calcarifer gregsoni (NWT, YT)
M. groenlandicus (Man, Nfld, NWT, Que, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Rhadinopsylla linta (BC, NWT, YT)

Lemmus sibiricus trimucronatus (Richardson)
Syn.: *Lemmus t. trimucronatus* (Richardson)
UNIRAMIA
SIPHONAPTERA
Catallagia dacenkoi fulleri (Alta, BC, Man, YT)
Megabothris groenlandicus (Nfld, NWT, Que, YT)
SIPHUNCULATA
Hoplopleura acanthopus (NWT)

Lemmus spp.
UNIRAMIA
SIPHONAPTERA
Megabothris calcarifer gregsoni (NWT, YT)
M. groenlandicus (Man, Nfld, YT)

Microtus chrotorrhinus (Miller) Rock vole
CHELICERATA
ACARI
Androlaelaps fahrenholzi (NB)
Bakerdania sp. (NB)
Cyrtolaelaps sp. (NB)
Echinonyssus isabellinus (NB)
Eulaelaps stabularis (NB)
Euryparasitus sp. (NB)
Euschoengastia blarinae (NB)
E. setosa (NB)
Glycyphagus hypudaei (NB)
Haemogamasus ambulans (NB)
H. liponyssoides (NB)
Ixodes angustus (NB)
Laelaps alaskensis (NB)
L. kochi (NB)
Listrophorus mexicanus (NB)
Miyatrombicula esoensis (NB)
Myocoptes j. japonensis (NB)
M. squamosus (NB)
Neotrombicula harperi (NB)
Orycteroxenus canadensis (NB)
O. soricis (NB)
Pygmephorus horridus (NB)
Radfordia hylandia (NB)
R. lemnina (NB)
Radfordia sp. (NB)
Trichoecius tenax (NB)
Trichoecius spp. (NB)
UNIRAMIA
SIPHONAPTERA
Atyphloceras bishopi (Man, Nfld, Ont, Que)
Catallagia borealis (NB)
Ctenophthalmus p. pseudagyrtes (NB)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris quirini (NS)
Peromyscopsylla catatina (Man, NB, Nfld, NS, Ont)

Microtus chrotorrhinus chrotorrhinus (Miller)
UNIRAMIA
SIPHONAPTERA
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
Peromyscopsylla catatina (NB, Ont)

Microtus longicaudus (Merriam) Long-tailed vole
Syn.: *Microtus longicaudus mordax* (Merriam)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Delotelis hollandi (Alta, BC)
D. telegoni (Alta, BC)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla dippiei truncata (BC)
H. o. occidentalis (BC)
Malaraeus telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
M. calcarifer gregsoni (NWT, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megarthroglossus d. divisus (BC)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Opisodasys k. keeni (Alta, BC)
Orchopeas sexdentatus agilis (BC)
Oropsylla idahoensis (Alta, BC)
Peromyscopsylla h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla arborea (Alta, BC)
SIPHUNCULATA
Hoplopleura acanthopus (BC)

Microtus longicaudus macrurus Merriam
UNIRAMIA

SIPHONAPTERA
Catallagia charlottensis (BC)
Hystrichopsylla o. occidentalis (Alta, BC)
Megabothris abantis (Alta, BC, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)

Microtus longicaudus vellerosus Allen
Syn.: *Microtus vellerosus* Allen
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Catallagia dacenkoi fulleri (Alta, BC, Man, YT)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)
SIPHUNCULATA
Hoplopleura acanthopus (BC)

Microtus miurus Osgood Singing vole
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Megabothris calcarifer gregsoni (NWT, YT)
M. groenlandicus (Man, Nfld, NWT, Que, Y

Microtus montanus canescens Bailey Montane vole
Syn.: *Microtus nanus canescens* Bailey
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Delotelis hollandi (Alta, BC)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla dippiei truncata (BC)
Malaraeus telchinus (Alta, BC)
Megabothris lucifer (Alta, BC, Man, Sask)
Rhadinopsylla difficilis (BC)
SIPHUNCULATA
Hoplopleura acanthopus (BC)

Microtus ochrogaster (Wagner) Prairie vole
Syn.: *Pedomys ochrogaster* Baird
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)

Microtus ochrogaster minor (Merriam)
Syn.: *Microtus minor* of Hopkins and Rothschild (1962)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla d. dippiei (Alta, BC, Man, Ont)
Megabothris lucifer (Alta, BC, Man, Sask)
Stenoponia americana (Alta, Man, Que)

Microtus oeconomus (Pallas) Tundra vole
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Catallagia dacenkoi fulleri (Alta, BC, Man, YT)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla o. occidentalis (BC)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. calcarifer gregsoni (NWT, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla ostsibirica longiloba (YT)

Microtus oeconomus macfarlani Merriam
UNIRAMIA
SIPHONAPTERA
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)

Microtus oeconomus operarius (Nelson)
Syn.: *Microtus operarius*
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)

Microtus oregoni (Bachman) Creeping vole
UNIRAMIA
DIPTERA
Cuterebra spp. (BC)

Microtus oregoni serpens Merriam
Syn.: *Microtus serpens* Merriam
CHELICERATA
ACARI
Leptinus americanus (BC)
UNIRAMIA
SIPHONAPTERA
Atyphloceras m. multidentatus (BC)
Catallagia charlottensis (BC)
Corrodopsylla curvata obtusata (BC)
Corypsylla ornata (BC)
Dasypsyllus gallinulae perpinnatus (BC)
Delotelis hollandi (Alta, BC)
Epitedia wenmanni (BC)
Hystrichopsylla o. occidentalis (Alta, BC)
Megabothris abantis (Alta, BC, YT)

Monopsyllus ciliatus protinus (BC)
M. wagneri ophidius (BC)
Nearctopsylla traubi (BC)
Opisodasys k. keeni (Alta, BC)
Peromyscopsylla hesperomys pacifica (BC)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla sectilis goodi (BC)
SIPHUNCULATA
Hoplopleura acanthopus (BC)
Polyplax spinulosa (BC)

Microtus pennsylvanicus (Ord) Meadow vole
CHELICERATA
ACARI
Allothrombium sp. (NS)
Androlaelaps fahrenholzi (NB, Sask)
Androlaelaps sp. (NS)
Dermacentor variabilis (Man, NS)
Echinonyssus isabellinus (NB)
Eulaelaps stabularis (NS, Sask)
Euryparasitus sp. (NB)
Euschoengastia spp. (NS, Sask)
Glycyphagidae gen. spp. (Ont)
Glycyphagus hypudaei (NB)
Haemaphysalis leporis-palustris (PEI)
Haemogamasus ambulans (NB)
Haemogamasus sp. (NS)
Hirstionyssus sp. (NS, Ont)
Hyperlaelaps sp. (NS)
Ixodes angustus (NS)
I. muris (NB, NS, Ont, PEI)
Laelaps alaskensis (NB, Ont)
L. kochi (NB, Ont)
Laelaps sp. (NS)
Listrophoridae gen. spp. (Ont)
Listrophorus mexicanus (NB)
L. m. squamiferus (NWT)
Miyatrombicula esoensis (NB)
Myobia spp. (Que)
Myobiidae gen. sp. (Ont)
Myocoptes j. japonensis (NB)
M. squamosus (NB)
Neotrombicula basignata (NS)
N. harperi (NB)
N. microti (NS)
Ololaelaps sp. (NS)
Protomyobia brevisetosa (NB)
Psorergates canadensis (Man, Ont)
Pygmephorus moreohorridus (NB)
Radfordia hylandi (NB)
Radfordia spp. (Que)
Trichoecius tenax (NB)
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (Alta, BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Atyphloceras bishopi (Man, Nfld, Ont, Que)
Catallagia borealis (Man)
C. dacenkoi fulleri (Alta, BC, Man, NWT, YT)
C. decipiens (Alta, BC, Man, Sask, YT)
C. jellisoni (Alta, BC, YT)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (NS)
Hystrichopsylla d. dippiei (Alta, BC, Man, Sask)
H. d. truncata (BC)
Megabothris abantis (Alta, BC, YT)
M. asio (NB, Ont)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. a. megacolpus (Ont)
M. calcarifer gregsoni (NWT, YT)
M. groenlandicus (Man, Nfld, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. wagneri systaltus (Alta, Man, Ont, Sask)
Opisocrostis bruneri (Alta, Man, Sask)
Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla catatina (Man, Nfld, NS, Ont)
P. h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)
P. h. markworthi (Ont)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Polyplax alaskensis (NB)
Rhadinopsylla fraterna (BC, Sask)
Thrassis petiolatus (Alta, BC)
SIPHUNCULATA
Hoplopleura acanthopus (Ont, Sask)
Neohaematopinus semifasciatus (Que)
Polyplax alaskensis (NB)

Microtus pennsylvanicus acadicus Bangs
CHELICERATA
ACRAI
Dermacentor variabilis (NS)
Haemaphysalis leporis-palustris (NS)
Ixodes angustus (NS)
I. muris (NS)

Microtus pennsylvanicus drummondii (Audubon and Bachman)
Syn.: *Microtus drummondii* (Audubon and Bachman)
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Catallagia dacenkoi fulleri (Alta, BC, Man, NWT, YT)
C. decipiens (Alta, BC, Sask)

C. jellisoni (Alta, BC)
Ctenophthalmus p. pseudagyrtes (Alta, Man, Ont, Sask)
Ctenopsyllus selenis (BC)
Delotelis telegoni (BC)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Foxella ignota albertensis (Man)
Hystrichopsylla dippiei truncata (BC)
Megabothris abantis (Alta, BC, YT)
M. asio (NWT)
M. a. megacolpus (BC, Man, NWT, Sask)
M. calcarifer gregsoni (NWT, YT)
M. lucifer (Alta, BC, Sask)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus e. eumolpi (BC)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
Peromyscopsylla catatina (Man)
P. h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Sask)
P. selenis (BC, Man, NWT, Sask, YT)
Rhadinopsylla fraterna (Alta, BC, Sask)
Trichopsylla lucifer (Alta)
SIPHUNCULATA
Hoplopleura acanthopus (BC)

Microtus pennsylvanicus enixus Bangs
Syn.: *Microtus enixus* Bangs
CHELICERATA
ACARI
Ixodes muris (Nfld)
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (Nfld)
Megabothris asio (Nfld)
M. a. asio (Nfld)
M. quirini (Nfld)
Peromyscopsylla h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)

Microtus pennsylvanicus insperatus (Allen)
UNIRAMIA
SIPHONAPTERA
Megabothris quirini (Alta, BC, NWT, Ont)

Microtus pennsylvanicus labradorius Bailey
UNIRAMIA
SIPHONAPTERA
Megabothris asio megacolpis (Alta, BC, Man, NWT, Ont, Que, Sask)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Que, Sask)

Microtus pennsylvanicus pennsylvanicus (Ord)
CHELICERATA
ACARI
Androlaelaps fahrenholzi (Ont)
Laelaps kochi (Ont)
L. muris (Ont)
Listrophorus leuckarti (Ont)
UNIRAMIA
SIPHONAPTERA
Atyphloceras bishopi (Ont, Que)
Ctenophthalmus p. pseudagyrtes (Ont, Que)
Epitedia w. wenmanni (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
Megabothris a. asio (Que)
M. quirini (Alta, BC, NWT, Ont)
Nosopsyllus fasciatus (Que)
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
Peromyscopsylla h. hamifer (Que)
SIPHUNCULATA
Hoplopleura acanthopus (Ont)

Microtus pennsylvanicus terraenovae (Bangs)
UNIRAMIA
SIPHONAPTERA
Megabothris a. asio (Nfld)

Microtus pinetorum scalopsoides (Audubon and Bachman) Pine vole
Syn.: *Pitymys pinetorum scalopsoides* Batchelder
CHELICERATA
ACARI
Androlaelaps fahrenholzi (Ont)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus pseudagyrtes (Ont)
Hystrichopsylla tahavuana (Ont)

Microtus richardsoni (DeKay) Water vole
UNIRAMIA
SIPHONAPTERA
Catallagia sculleni chamberlini (BC)
Megabothris abantis (Alta, BC, YT)

Microtus richardsoni richardsoni (DeKay)
UNIRAMIA
SIPHONAPTERA
Megabothris abantis (Alta, BC)

Microtus townsendii (Bachman) Townsend's vole
UNIRAMIA
DIPTERA
Cuterebra spp. (BC)
Wohlfahrtia vigil (BC)
SIPHONAPTERA
Delotelis hollandi (Alta, BC)
Hystrichopsylla o. occidentalis (BC)
Megabothris abantis (BC)
Opisodasys k. keeni (Alta, BC)
SIPHUNCULATA
Hoplopleura acanthopus (BC)

Microtus townsendii tetramerus (Rhoads)
Syn.: *M. tetramerus*
UNIRAMIA
SIPHONAPTERA
Atyphloceras m. multidentatus (BC)
Catallagia charlottensis (BC)
Nosopsyllus fasciatus (BC, Man, Nfld, NS, Ont, Que)

Microtus townsendii townsendii (Bachman)
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
Corypsylla ornata (BC)
Delotelis hollandi (BC)
Epitedia wenmanni (BC)
Megabothris abantis (Alta, BC, YT)
Opisodasys k. keeni (Alta, BC)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)

Microtus xanthognathus (Leach) Yellow-cheeked vole
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Megabothris calcarifer gregsoni (NWT, YT)
M. groenlandicus (Man, Nfld, NWT, Que, YT)
Peromyscopsylla h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Sask)

Microtus spp.
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (Alta, BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Atyphloceras bishopi (Man, Nfld, Ont, Que)
Catallagia charlottensis (BC)
C. dacenkoi fulleri (Alta, BC, Man, NWT, YT)
C. decipiens (Alta, BC, Man, Sask, YT)
C. sculleni chamberlini (BC)
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT, Que, YT)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask, YT)
Delotelis telegoni (Alta, BC)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla d. dippiei (Alta, BC, Man)
H. o. occidentalis (BC)
H. tahavuana (Que)
Malaraeus telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. a. megacolpus (Alta, BC, Man, NWT, Ont, Sask)
M. calcarifer gregsoni (NWT, YT)
M. groenlandicus (Nfld, Que, YT)
M. lucifer (Alta, BC, Man, Sask)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus thambus (Alta, BC, Nfld, NWT, Que, YT)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. wagneri ophidius (BC)
M. w. systaltus (Alta, Man, Ont, Sask)
M. w. wagneri (Alta, BC)
Nearctopsylla hyrtaci (Alta, BC)
Opisocrostis t. tuberculatus (Alta, BC, Sask, YT)
Opisodasys k. keeni (Alta, BC)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla catatina (Man)
P. h. hamifer (Alta, BC, Man, Nfld, NWT, Ont, Sask)
P. h. hesperomys (NS, Ont, Que)
P. ostsibirica longiloba (YT)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla linta (BC, NWT, YT)

Mus musculus L. House mouse
Syn.: *Mus musculus musculus* L.
CHELICERATA
ACARI
Myobiidae gen. spp. (Ont)
UNIRAMIA
DIPTERA
Cuterebra fontinella (Ont)
Cuterebra spp. (Ont)
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, NWT, Ont, Sask)
Leptopsylla segnis (BC, Nfld)
Malaraeus telchinus (Alta, BC)
Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)
Myodopsylla palposa (BC)
Nosopsyllus fasciatus (BC)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Rhadinopsylla s. sectilis (BC)
SIPHUNCULATA
Hoplopleura hesperomydis (Ont)

Mus spp.
UNIRAMIA
SIPHONAPTERA
Malaraeus bitterootensis (Alta)
M. telchinus (Alta, BC)
Megarthroglossus d. divisus (Alta)
Peromyscopsylla h. hamifer (Alta, BC, Nfld, Ont, Que)
Rhadinopsylla s. sectilis (BC)
Stenistomera alpina (Alta)
Stenopina americana (Alta, Man, Que)
Trichopsylla bitterootensis (Alta)

Neotoma cinerea (Ord) Bushy-tailed wood rat
CHELICERATA
ACARI
Ixodes ochotonae (BC)
UNIRAMIA

SIPHONAPTERA
Anomiopsyllus montanus (Alta)
Catallagia charlottensis (Alta, BC)
C. decipiens (Alta, BC, Sask)
C. jellisoni (Alta, BC, YT)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Malaraeus bitterootensis (BC)
Megabothris abantis (Alta, BC, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megarthroglossus d. divisus (Alta)
M. d. exsecatus (BC)
M. spenceri (BC)
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
Opisodasys k. keeni (Alta, BC)
Orchopeas sexdentatus agilis (Alta, BC, YT)
Peromyscopsylla ravalliensis (Alta, BC)
Rhadinopsylla arborea (Alta, BC)
Stenistomera alpina (Alta)

Neotoma cinerea cinerea (Ord)
CHELICERATA
ACARI
Dermacentor andersoni (Alta)
Ixodes spinipalpus (Alta)
UNIRAMIA
SIPHONAPTERA
Orchopeas sexdentatus agilis (Alta, BC, YT)

Neotoma cinerea drummondii (Richardson)
UNIRAMIA
SIPHONAPTERA
Megabothris abantis (Alta, BC, YT)
Megarthroglossus d. divisus (Alta, BC)
Monopsyllus w. wagneri (Alta, BC)
Orchopeas sexdentatus agilis (Alta, BC, YT)
Rhadinopsylla arborea (Alta, BC)
R. fraterna (Alta, BC, Sask)

Neotoma cinerea occidentalis Baird
Syn.: *Neotoma cinerea saxamans* Osgood
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Megabothris abantis (Alta, BC)
Megarthroglossus sicamus (BC)
M. p. procus (BC)
Orchopeas sexdentatus agilis (Alta, BC, YT)
Peromyscopsylla ravalliensis (BC)
Rhadinopsylla linta (BC, NWT, YT)
SIPHUNCULATA
Hoplopleura acanthopus (BC)
Neohaematopinus inornatus (BC)

Neotoma spp.
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Malaraeus bitterootensis (Alta)
Megarthroglossus d. divisus (Alta)
M. sicamus (BC)
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. w. wagneri (Alta, BC)
Orchopeas sexdentatus agilis (Alta, BC, YT)
Peromyscopsylla ravallaensis (Alta, BC)
Rhadinopsylla difficilis (BC)

Ondatra zibethicus (L.) Muskrat
CHELICERATA
Dermacarus ondatrae (Man, NS)
Dermacentor variabilis (NS)
Laelaps multispinosus (Man, NS, Ont)
Laelaps spp. (BC)
Listrophorus americanus (Man)
L. ondatrae (NWT)
L. validus (Ont)
Neotrombicula microti (NS)

Ondatra zibethicus osoyoosensis (Lord)
CHELICERATA
ACARI
Dermacerus validus (BC)
Eutrombicula harperi (BC)
Laelaps multispinosa (BC)
Listrophorus americanus (BC)
Radfordia spp. (BC)

Ondatra zibethicus zibethicus (L.)
CHELICERATA
ACARI
Dermacentor variabilis (NS)
Laelaps muris (Ont)
UNIRAMIA
SIPHONAPTERA
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

Ondatra spp.
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)

Onychomys leucogaster Baird Northern grasshopper mouse
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Onychomys leucogaster missouriensis (Audubon and Bachman)
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Sask)
Rhadinopsylla fraterna (Alta, BC, Sask)

Peromyscus leucopus (Rafinesque) White-footed mouse
CHELICERATA
ACARI
Androlaelaps sp. (NS)

Dermacentor variabilis (NS)
Eulaelaps stabularis (NS)
Haemogamasus sp. (NS)
Hypoaspis sp. (NS)
Ixodes angustus (NS)
Neotrombicula microti (NS)
Trombicula sp. (NS)
UNIRAMIA
DIPTERA
Cuterebra angustifrons (Ont)
SIPHONAPTERA
Catallagia charlottensis (Alta, BC)
Ctenophthalmus p. pseudagyrtes (NS)
Epitedia w. wenmanni (Alta, NS)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus vison (NS)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
Peromyscopsylla h. hesperomys (NS, Ont, Que)
P. scotti (Ont)

Peromyscus leucopus caudatus Smith
CHELICERATA
ACARI
Ixodes muris (NS)

Peromyscus leucopus noveboracensis (Fischer)
UNIRAMIA
DIPTERA
Cuterebra angustifrons (Ont)
C. grisea (Ont)
Cuterebra spp. (Ont)
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, Man, Ont, Sask)
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

Peromyscus maniculatus (Wagner) Deer mouse
Syn.: *Peromyscus canadensis* of Rothschild (1906)
CHELICERATA
ACARI
Androlaelaps casalis (NB)
A. fahrenholzi (NB)
Androlaelaps sp. (NS)
Bakerdania spp. (NB)
Cyrtolaelaps spp. (NB)
Dermacarus jonesi (BC)
Dermacarus spp. (NB)
Dermacentor variabilis (Man, NS)
Eulaelaps stabularis (NB)
Euschoengastia setosa (NB)
Glycyphagidae gen. spp. (Ont)
Glycyphagus hypudaei (NB)
Haemolaelaps glasgowi (Ont)
Hirstionyssus spp. (NS, Ont)
Ixodes angustus (NB)
I. muris (PEI)
Ixodes spp. (Ont)
Labidophorids (Ont)
Miyatrombicula esoensis (NB)
Myobia spp. (Que)
Myobiidae gen. spp. (Ont)
Myocoptes spp. (Que)
Proctolaelaps spp. (NB)
Psorergates watsoni (Ont)
Radfordia subuliger (NB)
Radfordia spp. (Que)
Trichoecius spp. (NB)
Trombiculidae gen. spp. (Ont)
UNIRAMIA
DIPTERA
Cuterebra grisea (BC)
Cuterebra spp. (Ont)
SIPHONAPTERA
Amalaraeus athabascae (BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Atyphloceras m. multidentatus (BC)
Callistopsyllus t. terinus (BC)
Catallagia borealis (Man)
C. charlottensis (BC)
C. decipiens (Alta, BC, Man, Sask, YT)
C. jellisoni (Alta, BC, YT)
C. mathesoni (BC)
C. s. sculleni (BC)
Catallagia spp. (Man)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ctenophthalmus p. pseudagyrtes (NB, Ont, Que)
Ctenopsyllus selenis (BC)
Delotelis hollandi (BC)
Epitedia scapani (BC)
E. w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hoplopleura hesperomydis (NB)
Hystrichopsylla d. dippiei (Alta, BC, Man, Sask)
H. d. spinata (BC)
H. d. truncata (BC)
H. o. occidentalis (BC)
Malaraeus euphorbi (Alta, BC, NWT, Sask)
M. telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
M. asio (NB)
M. a. megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. calcarifer gregsoni (NWT, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megarthroglossus divisus exsecatus (BC)
M. p. procus (BC)
Monopsyllus ciliatus protinus (BC)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. thambus (Alta, BC, Nfld, NWT, Que, Sask, YT)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. wagneri ophidius (BC)

M. w. systaltus (Alta, Man, Ont, Sask)
M. w. wagneri (Alta, BC)
Nosopsyllus fasciatus (BC, Ont, Que, Sask)
Opisodasys k. keeni (Alta, BC)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (NS)
O. leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
Peromyscopsylla catatina (NWT, Que)
P. h. hesperomys (NS)
P. h. hesperomys (NS)
P. h. pacifica (BC)
P. ravalliensis (BC)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla fraterna (BC, Sask)
R. linta (BC, NWT, YT)
R. sectilis goodi (BC)
R. s. sectilis (BC)
Stenistomera alpina (Alta)
SIPHUNCULATA
Hoplopleura hesperomydis (NB, NS, Ont, Que)

Peromyscus maniculatus abietorum Bangs
CHELICERATA
ACARI
Dermacentor variabilis (NS)
UNIRAMIA
SIPHONAPTERA
Catallagia borealis (NB)
Ctenophthalmus p. pseudagyrtes (NB)
Epitedia w. wenmanni (NB)
Malaraeus euphorbi (Alta, BC, Sask)
M. telchinus (Alta, BC)
Orchopeas caedens durus (NB)
O. leucopus (NB)
Stenoponia americana (NB)

Peromyscus maniculatus algidus Osgood
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus thambus (Alta, BC, Nfld, NWT, Que, YT)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

Peromyscus maniculatus alpinus Cowan
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Hystrichopsylla o. occidentalis (Alta, BC)
Megabothris abantis (Alta, BC, YT)
Monopsyllus w. wagneri (Alta, BC)
Opisodasys k. keeni (Alta, BC)

Peromyscus maniculatus anticostiensis Moulthrop
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)

Peromyscus maniculatus artemisiae (Rhoads)
UNIRAMIA
SIPHONAPTERA
Callistopsyllus t. terinus (BC)
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla dippiei truncata (BC)
Megabothris abantis (Alta, BC)
M. quirini (Alta, BC, NWT, Ont)
Meringis shannoni (BC)
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. w. wagneri (Alta, BC)
Opisodasys k. keeni (Alta, BC)
Rhadinopsylla s. sectilis (BC)
SIPHUNCULATA
Hoplopleura hesperomydis (BC)

Peromyscus maniculatus austerus (Baird)
CHELICERATA
ACARI
Radfordia subuliger (BC)
Trombicula spp. (BC)
UNIRAMIA
DIPTERA
Cuterebra grisea (BC)
Cuterebra spp. (BC)
SIPHONAPTERA
Atyphloceras m. multidentatus (BC)
Catallagia charlottensis (BC)
C. s. sculleni (BC)
Delotelis hollandi (Alta, BC)
Epitedia scapani (BC)
Hystrichopsylla o. occidentalis (BC)
Malaraeus telchinus (Alta, BC)
Megabothris abantis (Alta, BC)
Monopsyllus cileatus protinus (BC)
M. wagneri ophidius (BC)
Opisodasys k. keeni (Alta, BC)
Peromyscopsylla hesperomys pacifica (BC)
Rhadinopsylla sectilis goodi (BC)
SIPHUNCULATA
Hoplopleura hesperomydis (BC)

Peromyscus maniculatus bairdii (Hoy and Kennicott)
UNIRAMIA
SIPHONAPTERA
Catallagia borealis (Man, NB, Ont, Que)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Foxella ignota albertensis (Man)
Hystrichopsylla d. dippiei (Alta, BC, Man)

Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla catatina (Man, Nfld, NS, Ont)

Peromyscus maniculatus borealis Mearns
Syn.: *Peromyscus arcticus* of Rothschild, 1905
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (BC)
Catallagia charlottensis (Alta, BC)
C. decipiens (Alta, BC, Man, Sask, YT)
Ctenophthalmus p. pseudagyrtes (Alta, Man, Ont, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Malaraeus telchinus (BC)
Megabothris abantis (Alta, BC)
M. asio megacolpus (Man)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus thambus (Alta, BC, Nfld, NWT, Que, YT)
M. w. wagneri (Alta, BC)
Opisodasys k. keeni (Alta, BC)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla selenis (BC, Man, NWT, Sask, YT)
SIPHUNCULATA
Polyplax auricularis (Alta)

Peromyscus maniculatus gracilis (Le Conte)
UNIRAMIA
DIPTERA
Cuterebra spp. (Ont)
SIPHONAPTERA
Atyphloceras bishopi (Que)
Epitedia w. wenmanni (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
Stenoponia americana (Man, Ont, Que)

Peromyscus maniculatus interdictus Anderson
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
Malaraeus telchinus (BC)
Opisodasys k. keeni (Alta, BC)
Peromyscopsylla hesperomys pacifica (BC)

Peromyscus maniculatus keeni (Rhoads)
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
Opisodasys k. keeni (Alta,BC)

Peromyscus maniculatus macrorhinus (Rhoads)
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)

Peromyscus maniculatus maniculatus (Wagner)
UNIRAMIA
DIPTERA
Cuterebra spp. (Ont)
SIPHONAPTERA
Monopsyllus w. wagneri (Alta, BC)

Peromyscus maniculatus nebrascensis (Coues)
Syn.: *Peromyscus maniculatus osgoodi* Mearns
UNIRAMIA
SIPHONAPTERA
Callistopsyllus terinus campestris (Alta, Sask)
Catallagia decipiens (Alta, BC, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, NWT, Ont, Sask)
Hystrichopsylla d. dippiei (Alta, Sask)
Malaraeus euphorbi (Alta, BC, Sask)
Megabothris lucifer (Alta, BC, Sask)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)
Neopsylla inopina (Alta, BC, Sask)
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
Rhadinopsylla fraterna (Alta, BC, Sask)
R. rauschi (Sask)

Peromyscus maniculatus oreas Bangs
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
Delotelis hollandi (Alta, BC)
Epitedia scapanus (BC)
Malaraeus telchinus (BC)
Megabothris abantis (Alta, BC)
Monopsyllus ciliatus protinus (BC)
M. wagneri ophidius (BC)
Opisodasys k. keeni (Alta, BC)
Peromyscopsylla hesperomys pacifica (BC)
Rhadinopsylla sectilis goodi (BC)
SIPHUNCULATA
Hoplopleura hesperomydis (BC)

Peromyscus maniculatus prevostensis Osgood
Syn.: *Peromyscus sitkensis prevostensis* of Spencer (1966)
UNIRAMIA
SIPHUNCULATA
Hoplopleura hesperomydis (BC)

Peromyscus sitkensis Merriam — Sitka mouse
UNIRAMIA
SIPHONAPTERA
Malaraeus telchinus (Alta, BC)
Opisodasys k. keeni (Alta, BC)
Peromyscus spp.
CHELICERATA
ACARI
Androlaelaps fahrenholzi (Ont)

Dermacentor variabilis (NS)
Eulaelaps stabularis (Ont)
Ixodes angustus (Ont)
I. californicus (BC)
I. ochotonae (BC)
I. pacificus (BC)
Myobia spp. (BC)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Atyphloceras m. multidentatus (BC)
Callistopsyllus terinus campestris (Alta)
C. t. terinus (BC)
Catallagia charlottensis (BC)
C. dacenkoi fulleri (Alta, BC, Man, YT)
C. decipiens (Alta, BC, Man, Sask, YT)
C. sculleni chamberlini (BC)
C. s. sculleni (BC)
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Dasypsyllus gallinulae perpinnatus (BC)
Delotelus hollandi (Alta, BC)
Doratopsylla blarinae (NB, NS, Ont, Que)
Epitedia scapani (BC)
E. stewarti (BC)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla catatina (Man, Nfld, NS, Ont)

Peromyscus spp.
CHELICERATA
ACARI
Androlaelaps fahrenholzi (Ont)
Dermacentor variabilis (NS)
Eulaelaps stabularis (Ont)
Ixodes angustus (Ont)
I. californicus (BC)
I. ochotonae (BC)
I. pacificus (BC)
Myobia spp. (BC)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Atyphloceras m. multidentatus (BC)
Callistopsyllus terinus campestris (Alta)
C. t. terinus (BC)
Catallagia charlottensis (BC)
C. dacenkoi fulleri (Alta, BC, Man, YT)
C. decipiens (Alta, BC, Man, Sask, YT)
C. sculleni chamberlini (BC)
C. s. sculleni (BC)
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Dasypsyllus gallinulae perpinnatus (BC)
Delotelus hollandi (Alta, BC)
Doratopsylla blarinae (NB, NS, Ont, Que)
Epitedia scapani (BC)
E. stewarti (BC)
E. w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla d. dippiei (BC)
H. d. truncata (BC)
H. o. occidentalis (Alta, BC)
Malaraeus abantis (Alta, BC, YT)
M. euphorbi (Alta, BC, NWT, Sask)
M. telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. a. megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. groenlandicus (Man, Nfld, NWT, Que, YT)
M. lucifer (Alta, BC, Man, Sask)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megarthroglossus p. procus (BC)
Monopsyllus ciliatus protinus (BC)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. wagneri ophidius (BC)
M. w. systaltus (Alta, Man, Ont, Sask)
M. w. wagneri (Alta, BC)
Opisodasys k. keeni (Alta, BC)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
O. sexdentatus agilis (Alta, BC, YT)
Oropsylla rupestris (Alta, Man, Sask, YT)
Peromyscopsylla hesperomys adelpha (Alta, Sask)
P. h. hesperomys (NS, Ont, Que)
P. h. pacifica (BC)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla difficilis (BC)
R. sectilis goodi (BC)
R. s. sectilis (BC)
Thrassis acamantis (Alta, BC)
Trichopsylla wagneri systalta (Alta)
SIPHUNCULATA
Hoplopleura hesperomydis (BC)

Phenacomys intermedius Merriam Heather vole
CHELICERATA
ACARI
Listrophorus phenacomys (Man, NWT)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Hystrichopsylla o. occidentalis (BC)
Malaraeus telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)

Rhadinopsylla fraterna (Alta, BC, Sask)

Phenacomys intermedius celatus Merriam
Syn.: *Phenacomys ungava* Merriam
Phenacomys ungava ungava Merriam
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris asio (Nfld)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Phenacomys intermedius intermedius Merriam
UNIRAMIA
SIPHONAPTERA
Megabothris abantis (Alta, BC)

Phenacomys spp.
CHELICERATA
ACARI
Listrophorus phenacomys (Man, NWT)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. a. megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Rhadinopsylla difficilis (BC)

Rattus norvegicus (Berkenhout) Norway rat
Syn.: *Rattus rattus norvegicus* of Spencer (1939)
CHELICERATA
ACARI
Androlaelaps fahrenholzi (Ont)
Echinolaelaps echidninus (Que)
Laelaps spp. (Que)
Ornithonyssus bacoti (BC)
Radfordia spp. (Que)
UNIRAMIA
DIPTERA
Cuterebra spp. (Sask)
SIPHONAPTERA
Atyphloceras m. multidentatus (BC)
Catallagia charlottensis (BC)
Ctenocephalides canis (BC)
C. felis (BC)
C. f. felis (BC)
Ctenophthalmus p. pseudagyrtes (NB, Que)
Epitedia scapani (BC)
Hystrichopsylla o. occidentalis (BC)
Megabothris abantis (Alta, BC, YT)
M. quirini (Que)
Megarthroglossus p. procus (BC)
Neopsylla inopina (Alta, BC, Sask)
Nosopsyllus fasciatus (BC, Man, Nfld, NS, Ont, Que)
Oropsylla rupestris (Alta, Man, Sask, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask)
Rhadinopsylla sectilis goodi (BC)
Siphonaptera gen. spp. (BC)
Xenopsylla cheopis (BC, NB, NS, Ont, Que)
SIPHUNCULATA
Haematopinus spinulosus (Que)
Hoplopleura acanthopus (BC)
H. oenomydis (BC)
Polyplax spinulosa (BC, Que)

Rattus rattus (L.) Black rat
CHELICERATA
ACARI
Ornithonyssus bacoti (BC)
UNIRAMIA
SIPHONAPTERA
Hystrichopsylla o. occidentalis (BC)

Rattus rattus alexandrinus (Desmarest)
UNIRAMIA
SIPHONAPTERA
Nosopsyllus fasciatus (BC)
Siphonaptera gen. spp. (BC)
Xenopsylla cheopis (BC)

Rattus rattus rattus (L.)
UNIRAMIA
SIPHONAPTERA
Nosopsyllus fasciatus (BC)
Xenopsylla cheopis (BC)
SIPHUNCULATA
Polyplax spinulosa (BC)

Rattus spp.
UNIRAMIA
DIPTERA
Cuterebra sp. (Sask)
SIPHONAPTERA
Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)
Nosopsyllus fasciatus (BC, Man, Nfld, NS, Ont, Que, Sask)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
SIPHUNCULATA
Polyplax spinulosa (BC)

Synaptomys borealis (Richardson) Northern bog lemming
UNIRAMIA
SIPHONAPTERA
Amalaraeus athabascae (Alta, BC, Man, Nfld, NWT, Que, Sask)
A. dissimilis (Alta, BC, NWT, YT)
Ctenophthalmus p. pseudagyrtes (NB)
Epitedia w. wenmanni (NB)
Megabothris asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. calcarifer gregsoni (NWT, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)

Monopsyllus w. wagneri (Alta, BC)

Synaptomys borealis borealis (Richardson)
UNIRAMIA
SIPHONAPTERA
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask)

Synaptomys borealis chapmani Allen
CHELICERATA
ACARI
Androlaelaps fahrenholzi (NB)
Euryparasitus spp. (NB)
Glycyphagus hypudaei (NB)
Ixodes angustus (NB)
Laelaps alaskensis (NB)
Listrophorus synaptomys (NB)
Miyatrombicula esoensis (NB)
Orycteroxenus soricis (NB)
Pygmephorus horridus (NB)
Radfordia hylandi (NB)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus pseudagyrtes (NB)
Epitedia w. wenmanni (NB)
Megabothris quirini (NB)
SIPHUNCULATA
Hoplopleura acanthopus (Alta,BC)

Synaptomys borealis medioximus Bangs
UNIRAMIA
SIPHONAPTERA
Megabothris a. asio (Nfld)

Synaptomys borealis truei Merriam
Syn.: *Synaptomys borealis wrangeli* Merriam
UNIRAMIA
SIPHONAPTERA
Megabothris abantis (Alta,BC)

Synaptomys cooperi Baird — Southern bog lemming

CHELICERATA
ACARI
Androlaelaps fahrenholzi (NB)
Bakerdania spp. (NB)
Dermacentor variabilis (NS)
Echinonyssus isabellinus (NB)
Eulaelaps stabularis (NB)
Euryparasitus spp. (NB)
Glycyphagus hypudaei (NB)
Haemogamasus ambulans (NB)
H. liponyssoides (NB)
Ixodes angustus (NB)
I. muris (NS)
Laelaps alaskensis (NB)
L. kochi (NB)
Listrophorus mexicanus (NB)
L. synaptomys (NB)
Megabothris quirini (NB)
Miyatrombicula esoensis (NB)
Neotrombicula harperi (NB)
Pygmephorus horridus (NB)
Radfordia hylandi (NB)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (NB)
Epitedia w. wenmanni (NB)
Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. quirini (NB)
SIPHUNCULATA
Hoplopleura acanthopus (NB)

Synaptomys cooperi cooperi Baird
CHELICERATA
ACARI
Ixodes muris (NS)
Synaptomys spp.
UNIRAMIA
SIPHONAPTERA
Amphipsylla sibirica pollionis (Alta, BC, Nfld, YT)
Catallagia charlottensis (BC)
Megabothris abantis (Alta, BC, YT)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. a. megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. groenlandicus (Man, Nfld, NWT, Que, YT)
M. lucifer (Alta, BC, Man, Sask)
Monopsyllus w. wagneri (Alta, BC)
Peromyscopsylla catatina (NB)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Thrassis acamantis (Alta, BC)

MURIDAE OF UNDETERMINED SPECIES

Deer mouse
UNIRAMIA
SIPHONAPTERA
Malaraeus euphorbi (Alta, BC, NWT, Sask)

Field mouse
CHELICERATA
ACARI
Dermacentor andersoni (BC)
Psorergates spp. (Ont)
UNIRAMIA
DIPTERA
Cuterebra grisea (Sask)
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)

House mouse
CHELICERATA
ACARI
Myobia musculi (Ont)
Psorergates sp. (Ont)
UNIRAMIA
DIPTERA
Cuterebra grisea (BC)
Cuterebra sp. (Man)
SIPHONAPTERA
Monopsyllus thambus (Nfld)
M. wagneri systaltus (Alta, Man, Ont, Sask)

Kangaroo mouse
UNIRAMIA
SIPHONAPTERA
Ctenopsyllus selenis (Alta)

Lab rat
UNIRAMIA
DIPTERA
Wohlfahrtia meigenii (Alta)

Lemming
UNIRAMIA
SIPHONAPTERA
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)

Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)
M. groenlandicus (Man)

Meadow vole
UNIRAMIA
SIPHONAPTERA
Megabothris a. asio (NB, Nfld, NS, Ont, PEI, Que)

Mice
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC, Ont)
Ixodes angustus (BC)
I. cookei (BC)
I. pacificus (BC)
Psorergates simplex (unspecified)
UNIRAMIA
DIPTERA
Cuterebra grisea (Alta)
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Ctenophthalmus p. pseudagyrtes (NB, NS, Ont)
Malaraeus telchinus (Alta, BC)
Megabothris abantis (Alta, BC)
M. groenlandicus (Man)
Monopsyllus thambus (Alta, BC, Nfld, NWT, Que, YT)
M. w. wagneri (Alta, BC)
Nosopsyllus fasciatus (BC, Ont, Que, Sask)
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

Packrat
CHELICERATA
ACARI
Dermacentor andersoni (BC)
Ixodes cookei (BC)

Pallid vole
UNIRAMIA
SIPHONAPTERA
Amphipsylla washingtona (Alta)

Pocket gopher
UNIRAMIA
SIPHONAPTERA
Foxella ignota albertensis (Alta, Sask)
F. i. ignota (Man)
F. i. recula (BC)

Pocket mouse
CHELICERATA
ACARI
Dermacentor andersoni (BC)

Red-backed mouse
UNIRAMIA
SIPHONAPTERA
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT, Que, YT)

Red-backed vole
UNIRAMIA
SIPHONAPTERA
Malaraeus telchinus (Alta, BC)

Vole
CHELICERATA
ACARI
Ixodes angustus (BC)
UNIRAMIA
DIPTERA
Cuterebra sp. (unspecified)
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)

White mouse
CHELICERATA
ACARI
Dermacentor andersoni (BC)

Wood rat
UNIRAMIA
SIPHONAPTERA
Orchopeas sexdentatus agilis (Alta, BC, YT)

Family SCIURIDAE

Cynomys ludovicianus Baird — Black-tailed prairie dog
UNIRAMIA
SIPHONAPTERA
Opisocrostis labis (Alta, Sask)
Thrassis b. bacchi (Alta, Man, Sask)

Cynomys ludovicianus ludovicianus (Ord)
UNIRAMIA
SIPHONAPTERA
Opisocrostis labis (Alta, Sask)
O. t. tuberculatus (Alta, BC, Sask)
Oropsylla rupestris (Alta, Man, Sask)
Thrassis b. bacchi (Alta, Man, Sask)
SIPHUNCULATA
Neohaematopinus marmotae (Sask)

Eutamias amoenus Allen — Yellow-pine chipmunk
UNIRAMIA
SIPHONAPTERA

Monopsyllus ciliatus protinus (BC)
M. eumolpi (Alta, BC, Man, NWT, Sask, Ont, YT)
Orchopeas caedens durus (BC)

Eutamias amoenus affinis (Allen)
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Hystrichopsylla d. dippiei (BC)
Monopsyllus eumolpi (Alta, BC, Ont, Sask)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
SIPHUNCULATA
Hoplopleura arboricola (BC)
Neohaematopinus sciuropteri (BC)

Eutamias amoenus felix (Rhoads)
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)

Eutamias amoenus ludibondus Hollister
UNIRAMIA
SIPHONAPTERA
Monopsyllus eumolpi (Alta,BC,Ont,Sask)

Eutamias amoenus luteiventris (Allen)
UNIRAMIA
SIPHONAPTERA
Monopsyllus eumolpi (Alta, BC, Ont, Sask)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
SIPHUNCULATA
Hoplopleura arboricola (BC)

Eutamias minimus (Bachman) Least chipmunk
CHELICERATA
ACARI
Haemogamasus ambulans (Ont)
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Megabothris acerbus (Man, Ont)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
Orchopeas sexdentatus agilis (Alta, BC, YT)

Eutamias minimus borealis (Allen)
Syn.: *Eutamias borealis* of Holland (1950)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Megabothris asio megacolpus (Man)
M. quirini (Alta, BC, Man, NWT, Ont)
Monopsyllus eumolpi (Alta, BC, Ont, Sask)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. tolli (YT)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Opisocrostis bruneri (unspecified)

Eutamias minimus minimus (Bachman)
UNIRAMIA
SIPHONAPTERA
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)

Eutamias minimus selkirki Cowan
UNIRAMIA
SIPHONAPTERA
Monopsyllus eumolpi (Alta, BC, Ont, Sask)

Eutamias townsendii (Bachman) Townsend's chipmunk
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)
Oropsylla idahoensis (Alta, BC, YT)

Eutamias townsendii cooperi (Baird)
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)

Eutamias spp.
CHELICERATA
ACARI
Ixodes pacificus (BC)
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
C. decipiens (Alta, BC, Man, Sask, YT)
Ceratophyllus diffinis (BC)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, NWT, Ont, Sask)
Megabothris asinus (Alta, BC)
M. asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. lucifer (Alta, BC, Man, Sask)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus eumolpi (Alta, BC, Ont, Sask)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. vison (Alta)
M. w. wagneri (Alta, BC)
Opisodasys k. keeni (Alta, BC)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (BC, Nfld, NWT)
Oropsylla idahoensis (Alta, BC, YT)
Thrassis acamantis (Alta)
T. petiolatus (Alta, BC)
Trichopsylla e. eumolpi (Alta)
T. vison (Alta)

Glaucomys sabrinus (Shaw) Northern flying squirrel
CHELICERATA
ACARI
Haemogamasus sp. (NS)
Ixodes marxi (NS)
Laelaps kochi (Ont)
UNIRAMIA
SIPHONAPTERA
Conorhinopsylla stanfordi (Ont)
Epitedia faceta (Ont, Que)
E. w. wenmanni (NB)
Megarthroglossus divisus exsecatus (BC)
Monopsyllus ciliatus protinus (BC)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)
O. vesperalis (BC)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (Alta, BC, NB, Nfld, NS, NWT, Ont, Que, Sask)
Tarsopsylla octodecimdentata coloradensis (Alta, BC, Man, NWT, Ont, Sask, YT)
SIPHUNCULATA
Neohaematopinus sciuropteri (Alta)

Glaucomys sabrinus alpinus (Richardson)
UNIRAMIA
SIPHONAPTERA
Opisodasys pseudarctomys (BC)
O. vesperalis (BC)
Tarsopsylla octodecemdentata coloradensis (BC)
SIPHUNCULATA
Neohaematopinus sciuropteri (BC)

Glaucomys sabrinus canescens Howell
UNIRAMIA
SIPHONAPTERA
Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)

Glaucomys sabrinus columbiensis Howell
UNIRAMIA
SIPHONAPTERA
Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)
O. vesperalis (BC)
SIPHUNCULATA
Hoplopleura trispinosa (BC)
Neohaematopinus sciuropteri (BC)

Glaucomys sabrinus fuliginosus (Rhoads)
UNIRAMIA
SIPHONAPTERA
Megarthroglossus divisus exsecatus (BC)
Opisodasys vesperalis (BC)

Glaucomys sabrinus gouldi Anderson
CHELICERATA
ACARI
Ixodes marxi (NS)

Glaucomys sabrinus macrotis (Mearns)
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (NB)
Opisodasys pseudarctomys (Alta, NB, Ont)
Orchopeas leucopus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)

Glaucomys sabrinus makkovikensis (Sornborger)
UNIRAMIA
SIPHONAPTERA
Opisodasys pseudarctomys (Nfld)

Glaucomys sabrinus oregonensis (Bachman)
CHELICERATA
ACARI
Acari gen. spp. (BC)
Ixodes pacificus (BC)
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)
Opisodasys vesperalis (BC)
Orchopeas nepos (BC)
SIPHUNCULATA
Hoplopleura trispinosa (Alta, BC)
Microphthirus uncinatus (Alta, BC)
Neohaematopinus sciuropteri (Alta, BC)

Glaucomys volans (L.) Southern flying squirrel
UNIRAMIA
SIPHONAPTERA
Ceratophyllus gallinae (Man)
Canorhinopsylla stanfordi (Ont)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia faceta (Ont, Que)
Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)
Orchopeas h. howardi (Alta, Ont)
O. leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Glaucomys volans volans (L.)
UNIRAMIA
SIPHONAPTERA
Cornorhinopsylla stanfordi (Ont)
Epitedia faceta (Ont, Que)
Orchopeas h. howardii (Alta, Ont)
O. leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

Glaucomys spp.
Syn.: *Sciuropterus* spp.
UNIRAMIA
SIPHONAPTERA
Epitedia faceta (Ont, Que)
Megarthroglossus p. procus (BC)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

Marmota caligata (Eschscholtz) Hoary marmot
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)
Oropsylla arctomys (Alta, BC, Man, NB, Ont, Que, Sask)
Thrassis s. spenceri (Alta,BC)

Marmota caligata cascadensis Howell
UNIRAMIA
SIPHONAPTERA
Thrassis s. spenceri (Alta, BC)

Marmota caligata okanagana (King)
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (BC)
Thrassis s. spenceri (Alta, BC)
SIPHUNCULATA
Neohaematopinus marmotae (BC)

Marmota flaviventris (Audubon and Bachman) Yellow-bellied marmot
UNIRAMIA
SIPHONAPTERA
Thrassis acamantis (Alta, BC)

Marmota flaviventris avara (Bangs)
CHELICERATA
ACARI
Dermacentor andersoni (BC)
UNIRAMIA
SIPHONAPTERA
Oropsylla acamantis (BC)
O. idahoensis (Alta, BC, YT)
Thrassis acamantis (Alta, BC)
SIPHUNCULATA
Neohaematopinus marmotae (BC)

Marmota monax (L.) Woodchuck
CHELICERATA
ACARI
Androlaelaps sp. (NS)
Dermacentor andersoni (Alta, BC, Ont)
Haemolaelaps glasgowi (Ont)
Ixodes cookei (Ont)
I. texanus (Ont)
UNIRAMIA
SIPHONAPTERA
Opiscrostis bruneri (Alta, Man, Sask)
Oropsylla arctomys (Alta, BC, Man, NB, NS, NWT, Ont, Que, Sask)
Thrassis s. spenceri (Alta, BC)
SIPHUNCULATA
Enderleinellus marmotae (Ont)

Marmota monax canadensis (Erxleben)
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Marmota monax petrensis Howell
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (BC)
Thrassis s. spenceri (Alta, BC)
SIPHUNCULATA
Neohaematopinus marmotae (BC)

Marmota monax rufescens Howell
CHELICERATA
ACARI
Ixodes cookei (Ont, Que)
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)

Marmota vancouverensis Swarth Vancouver marmot
UNIRAMIA
SIPHONAPTERA
Thrassis acamantis (BC)
T. s. spenceri (BC)

Marmota spp.
CHELICERATA
ACARI
Dermacentor andersoni (Alta)
UNIRAMIA
SIPHONAPTERA
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
O. idahoensis (Alta)
Thrassis acamantis (Alta, BC)
T. s. spenceri (Alta, BC)

Sciurus carolinensis Gmelin Gray squirrel
Syn.: *Sciurus carolinensis leucotis* of Judd (1954)
UNIRAMIA
SIPHONAPTERA
Conorhinopsylla stanfordi (Ont)
Megabothris acerbus (Man, Ont)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. h. howardi (Alta, Ont)
O. nepos (BC)
SIPHUNCULATA
Neohaematopinus sciurinus (Ont)

Sciurus carolinensis pennsylvanicus Ord
UNIRAMIA

SIPHUNCULATA
Neohaematopinus sciurinus (BC)

Sciurus niger L. Fox squirrel
UNIRAMIA
SIPHONAPTERA
Orchopeas h. howardi (Alta,Ont)

Sciurus spp.
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
Megarthroglossus divisus exsecatus (BC)
Orchopeas h. howardi (Alta, Ont)
O. sexdentatus agilis (Alta, BC, YT)

Spermophilus columbianus (Ord) Columbian ground squirrel
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)
Ixodes sculptus (Alta)
UNIRAMIA
SIPHONAPTERA
Callistopsyllus t. terinus (BC)
Catallagia charlottensis (BC)
C. decipiens (Alta, BC, Man, Sask, YT)
Hystrichopsylla dippiei spinata (BC)
H. d. truncata (BC)
Malaraeus telchinus (BC)
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
Neopsylla inopina (Alta, BC, Sask)
Opisocrostis bruneri (Alta)
O. t. tuberculatus (Alta, BC, Sask, YT)
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
O. idahoensis (Alta, BC, YT)
O. petiolatus (Alta)
O. t. tuberculata (Alta)
Tamiophila grandis (Alta)
Thrassis petiolatus (Alta, BC)
SIPHUNCULATA
Enderleinellus suturalis (Alta)
Neohaematopinus laeviusculus (Alta)

Spermophilus columbianus columbianus (Ord)
Syn.: *Citellus columbianus columbianus* of Holland (1944)
CHELICERATA
ACARI
Dermacentor andersoni (BC)
UNIRAMIA
SIPHONAPTERA
Foxella ignota recula (BC)
Megabothris abantis (Alta, BC)
Monopsyllus eumolpi (Alta, BC, Ont, Sask)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Neopsylla inopina (Alta, BC, Sask)
Opiscrostis t. tuberculatus (BC)
Oropsylla idahoensis (Alta, BC)
O. petiolatus (BC)
O. tuberculatus (Alta, BC)
Rhadinopsylla fraterna (BC)
R. s. sectilis (BC)
Thrassis acamantis (BC)
T. petiolatus (BC)
SIPHUNCULATA
Neohaematopinus laeviusculus (BC)

Spermophilus franklinii (Sabine) Franklin's ground squirrel
Syn.: *Citellus franklinii* (Sabine)
CHELICERATA
ACARI
Dermacentor variabilis (Man)
Ixodes sculptus (Alta)
UNIRAMIA
SIPHONAPTERA
Hystrichopsylla d. dippiei (Alta, Man, Ont)
Megabothris atrox (Alta, Man, Ont)
M. quirini (Alta, BC, NWT, Ont)
Neopsylla inopina (Alta, BC, Sask)
Opisocrostis bruneri (Alta, Man, Sask)
O. labis (Alta, Sask)
O. t. tuberculatus (Alta, Sask)
Orchopeas c. caedens (Alta, BC, NWT, Sask, YT)
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
O. bacchi (unspecified)
O. rupestris (Alta, Man, Sask)
Thrassis b. bacchi (Alta, Man, Sask)
SIPHUNCULATA
Enderleinellus suturalis (Alta)

Spermophilus lateralis (Say) Golden-mantled ground squirrel
UNIRAMIA
SIPHONAPTERA
Amalaraeus dissimilis (Alta, BC, NWT, YT)
Oropsylla idahoensis (Alta, YT)
Rhadinopsylla difficilis (BC)
Thrassis petiolatus (Alta, BC)

Spermophilus lateralis tescorum (Hollister)
UNIRAMIA
SIPHONAPTERA
Oropsylla idahoensis (Alta)

Spermophilus parryii (Richardson) Arctic ground squirrel
Syn.: *Spermophilus undulatus* of Spencer (1966)
S. u. parryii of Spencer (1966)
UNIRAMIA
SIPHONAPTERA
Megabothris groenlandicus (Nfld, NWT, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT, Que, YT)
Opisocrostis t. tuberculatus (Alta, BC, Sask, YT)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)

Oropsylla alaskensis (NWT, YT)
O. idahoensis (Alta, BC, YT)
O. rupestris (Alta, Man, Sask, YT)
Rhadinopsylla linta (BC, NWT, YT)
SIPHUNCULATA
Neohaematopinus laeviusculus (NWT)

Spermophilus parryii parryii (Richardson)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus lunatus tundrensis (NWT, Que)
Oropsylla alaskensis (NWT)

Spermophilus parryii plesius Osgood
Syn.: *Spermophilus undulatus plesius*
UNIRAMIA
SIPHONAPTERA
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Oropsylla idahoensis (Alta, BC, YT)

Spermophilus richardsonii (Sabine) Richardson's ground squirrel
Syn.: *Citellus richardsonii* (Sabine)
CHELICERATA
ACARI
Dermacentor andersoni (Alta)
Haemaphysalis leporis-palustris (Alta)
Hirstionyssus occidentalis (Alta)
Ixodes kingi (Alta)
I. sculptus (Alta)
Liponyssus montanus (Man)
L. occidentalis (Man)
Pneumonyssus spp. (Alta)
UNIRAMIA
DIPTERA
Cuterebra grisea (Sask)
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Epitedia inopina (Alta)
E. w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla d. dippiei (Alta, Man, Ont, Sask)
Nearctopsylla brooksi (Alta, BC)
Neopsylla inopina (Alta, BC, Sask)
Opisocrostis bruneri (Alta, Man, Sask)
O. labis (Alta, Sask)
O. t. tuberculatus (Alta, Sask, YT)
Oropsylla arctomys (Alta)
O. idahoensis (Alta)
O. rupestris (Alta, Man, Sask, YT)
Rhadinopsylla fraterna (Alta, BC, Sask)
Tamiophila grandis (Alta)
Thrassis b. bacchi (Alta, Man, Sask)
T. petiolatus (Alta, BC)
SIPHUNCULATA
Enderleinellus suturalis (Alta)
Neohaematopinus laeviusculus (Alta)

Spermophilus richardsonii richardsonii (Sabine)
Syn.: *Citellus richardsonii richardsonii* (Sabine)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, Man, Ont, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, NWT, Ont, Sask)
Hystrichopsylla d. dippiei (Alta, Sask)
Megabothris asio megacolpus (Sask)
M. lucifer (Alta, BC, Sask)
Neopsylla inopina (Alta, Sask)
Opisocrostis bruneri (Alta, Man, Sask)
O. labis (Alta, Sask)
O. t. tuberculatus (Alta, BC, Sask, YT)
Oropsylla idahoensis (Alta, BC)
O. rupestris (Alta, Man, Sask, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask)
Rhadinopsylla fraterna (Alta, BC, Sask)
Thrassis b. bacchi (Alta, Man, Sask, unspecified)

Spermophilus saturatus (Rhoads) Cascade golden-mantled ground squirrel
UNIRAMIA
SIPHONAPTERA
Oropsylla idahoensis (Alta, BC, YT)

Spermophilus tridecemlineatus (Mitchell) Thirteen-lined ground squirrel
Syn.: *Citellus tridecemlineatus* (Mitchell)
CHELICERATA
ACARI
Dermacentor variabilis (Man)
Liponyssus montanus (Man)
L. occidentalis (Man)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus bruneri (Man)
Opisocrostis bruneri (Alta, Man, Sask)
O. t. tuberculatus (Alta, BC, Sask)
Oropsylla idahoensis (Alta, BC)
Thrassis b. bacchi (Alta, Man, Sask)

Spermophilus tridecemlineatus tridecemlineatus (Mitchell)
Syn.: *Citellus t. tridecemlineatus* (Mitchell)
UNIRAMIA
SIPHONAPTERA
Opisocrostis bruneri (Alta, Man, Sask)
O. t. tuberculatus (Alta, Sask)
Thrassis b. bacchi (Alta, Sask)

Spermophilus spp.
Syn.: *Citellus* spp.
CHELICERATA
ACARI
Dermacentor andersoni (BC, Man)
UNIRAMIA
SIPHONAPTERA
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

Oropsylla alaskensis (NWT, YT)
O. idahoensis (Alta, BC, YT)
O. rupestris (Alta, Sask)
Rhadinopsylla linta (BC, NWT, YT)
Thrassis petiolatus (Alta, BC)
SIPHUNCULATA
Linognathoides montanus (Canada)

Tamiasciurus douglasii (Bachman) Douglas' squirrel
CHELICERATA
ACARI
Ixodes spinapalpus (BC)
UNIRAMIA
SIPHONAPTERA
Hystrichopsylla o. occidentalis (BC)
Megarthroglossus d. divisus (BC)
M. p. procus (BC)
Monopsyllus ciliatus protinus (BC)
M. wagneri ophidius (BC)
Opisodasys vesperalis (BC)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. nepos (BC)

Tamiasciurus douglasii mollipilosus (Audubon and Bachman)
Syn.: *Tamiasciurus douglasii cascadensis* (Allen)
CHELICERATA
ACARI
Ixodes angustus (BC)
UNIRAMIA
SIPHONAPTERA
Dasypsyllus gallinulae perpinnatus (BC)
Megarthroglossus p. procus (BC)
Monopsyllus ciliatus protinus (BC)
Nosopsyllus fasciatus (BC, Ont, Que, Sask)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. nepos (BC)
Rhadinopsylla sectilis goodi (BC)
SIPHUNCULATA
Hoplopleura sciuricola (BC)

Tamiasciurus hudsonicus (Erxleben) Red squirrel
Syn.: *Sciurus hudsonicus* Erxleben
CHELICERATA
ACARI
Dermacarus hypudaei septentrionalis (Que)
D. newyorkensis (Que)
D. sciurinus (Que)
Dermacentor variabilis (NS)
Gliricoptes spp. (Que)
Glycephagidae gen. spp. (Ont)
Haemaphysalis leporis-palustris (NS)
Haemolaelaps glasgowi (Ont)
Ixodes angustus (Alta)
I. marxi (NS, Ont, Que)
I. muris (NS)
Labidophorids (Ont)
Neotrombicula microti (NS)
Trombicula spp. (Que)
Trombiculidae gen. spp. (Ont)
Zumptiella bakeri (Que)
UNIRAMIA
SIPHONAPTERA
Catallagia charlottensis (BC)
C. decipiens (Alta, BC, Man, Sask, YT)
Ceratophyllus lunatus tundrensis (Man, Nfld, NWT, Que, YT)
C. niger (BC)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Hystrichopsylla dippiei ssp. (NB, Ont)
H. d. truncata (BC)
Megabothris abantis (Alta, BC, YT)
M. asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megarthroglossus d. divisus (Alta)
M. d. exsecatus (BC)
Monopsyllus ciliatus protinus (BC)
M. eumolpi (Alta, BC, Ont, Sask)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. vison (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
M. w. wagneri (Alta, BC)
Opisocrostis bruneri (Man)
O. t. tuberculatus (Alta, BC, Sask, YT)
Opisodasys pseudarctomys (Alta, BC, Man, NS, Ont, Que)
Orchopeas caedens (NWT, Ont)
O. c. caedens (Alta, BC, Man, NWT, Que, Sask, YT)
O. c. durus (BC, Nfld, NS, NWT)
O. h. howardi (Alta, Ont)
O. leucopus (Que)
O. sexdentatus agilis (Alta, BC, YT)
Oropsylla arctomys (Alta, BC, Man, NB, NWT, Ont, Que, Sask)
Peromyscopsylla catatina (Man, Nfld, NS, Ont)
P. selenis (Alta, BC, Man, NWT, Sask, YT)
Rhadinopsylla arborea (Alta, BC)
R. fraterna (Alta, BC, Sask)
R. linta (BC, NWT, YT)
R. s. sectilis (BC)
Stenoponia americana (NB)
Tarsopsylla octodecimdentata coloradensis (Alta, BC, Man, NWT, Ont, Sask YT)
Trichopsylla vison (Alta)
SIPHUNCULATA
Enderleinellus nitschi (Ont, Que)
Hoplopleura hesperomydis (Que)
H. sciuricola (Alta, BC)
Neohaematopinus sciurinus (Alta)
N. semifasciatus (Ont)

Tamiasciurus hudsonicus baileyi (Allen)
Syn.: *Sciurus richardsoni baileyi* of Brown (1944)
UNIRAMIA
SIPHONAPTERA

Malaraeus euphorbi (Alta, BC, NWT, Sask)
Megarthroglossus d. divisus (Alta)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Rhadinopsylla arborea (Alta, BC)

Tamiasciurus hudsonicus columbiensis Howell
UNIRAMIA
SIPHONAPTERA
Megabothris quirini (Alta, BC, NWT, Ont)
Megarthroglossus divisus exsecatus (BC)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas caedens durus (BC, Nfld, NWT)
SIPHUNCULATA
Neohaematopinus sciurinus (BC)
Solenopotes ferrisi (BC)

Tamiasciurus hudsonicus gymnicus (Bangs)
CHELICERATA
ACARI
Haemaphysalis leporis-palustris (NS)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (NB)
Epitedia w. wenmanni (NB)
Megabothris quirini (NB)
Monopsyllus vison (NB)
Nearctopsylla g. genalis (NB)
Orchopeas caedens durus (NB)
O. h. howardi (Que)

Tamiasciurus hudsonicus hudsonicus (Erxleben)
UNIRAMIA
SIPHONAPTERA
Megabothris quirini (Alta, BC, Man, NWT, Ont)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Opisocrostis bruneri (Alta, Man, Sask)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. leucopus (Man)
Peromyscopsylla catatina (Ont)

Tamiasciurus hudsonicus lanuginosus (Bachman)
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)
SIPHUNCULATA
Neohaematopinus sciurinus (BC)

Tamiasciurus hudsonicus laurentianus Anderson
UNIRAMIA
SIPHONAPTERA
Megabothris quirini (Que)

Tamiasciurus hudsonicus loquax (Bangs)
CHELICERATA
ACARI
Ixodes marxi (Ont)
UNIRAMIA
SIPHONAPTERA
Orchopeas h. howardii (Ont)

Tamiasciurus hudsonicus minnesota (Allen)
UNIRAMIA
SIPHONAPTERA
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

Tamiasciurus hudsonicus picatus (Swarth)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus petrochelidoni (BC)
Monopsyllus ciliatus protinus (BC)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

Tamiasciurus hudsonicus preblei Howell
UNIRAMIA
SIPHONAPTERA
Ceratophyllus garei (Alta, BC, Man, NWT, Que, YT)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas c. caedens (Alta, BC, NWT, Sask, YT)
O. c. durus (NWT)
O. sexdentatus agilis (Alta,YT)

Tamiasciurus hudsonicus richardsoni (Bachman)
Syn.: *Sciurus hudsonicus richardsoni* Bachman
UNIRAMIA
SIPHONAPTERA
Megarthroglossus d. divisus (Alta)
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas sexdentatus agilis (Alta)

Tamiasciurus hudsonicus streatori (Allen)
CHELICERATA
ACARI
Ixodes hearlei (BC)
UNIRAMIA
SIPHONAPTERA
Atyphloceras m. multidentatus (BC)
Epitedia w. wenmanni (Alta, BC, Man, NB, NWT, Ont, Sask)
Megabothris abantis (BC)
Megarthroglossus divisus exsecatus (BC)
Monopsyllus eumolpi (Alta, BC, Ont, Sask)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Opisodasys pseudarctomys (Alta, Ont)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Rhadinopsylla s. sectilis (BC)
Thrassis acamantis (Alta)
SIPHUNCULATA
Hoplopleura sciuricola (BC)
Neohaematopinus sciurinus (BC)

Tamiascurus hudsonicus ungavensis Anderson
UNIRAMIA
SIPHONAPTERA
Monopsyllus vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)

Orchopeas caedens durus (Nfld, Que)

Tamiasciurus spp.
CHELICERATA
ACARI
Ixodes pacificus (BC)
UNIRAMIA
SIPHONAPTERA
Atyphloceras m. multidentatus (BC)
Cororhinopsylla stanfordi (Ont)
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Epitedia w. wenmanni (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megarthroglossus divisus exsecatus (BC)
Monopsyllus cileatus protinus (BC)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. nepos (BC)
Tarsopsylla octodecimdentata coloradensis (Alta, BC, Man, NWT, Ont, Sask, YT)

Tamias striatus (L.) Eastern chipmunk
CHELICERATA
ACARI
Dermacarus hylandi (NB)
Dermacentor variabilis (Man, NS)
Euschoengastia setosa (Que)
Haemaphysalis leporis-palustris (PEI)
Haemolaelaps glasgowi (Ont)
Ixodes angustus (Ont)
I. muris (NS)
Miyatrombicula esoensis (NB)
Myocoptes spp. (Que)
Neotrombicula harperi (NB)
Sarcoptidae gen. spp. (Ont)
Trombiculidae gen. spp. (Ont)
UNIRAMIA
DIPTERA
Cuterebra emasculator (Ont)
Cuterebra sp. (Ont)
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Hoplopleura erratica (Ont, Que)
Megabothris acerbus (Man, Ont)
M. asio megacolpus (Man)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. vison (Ont)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
O. leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Tamiophila grandis (Ont, Que)
SIPHUNCULATA
Hoplopleura erratica (Ont, Que)
Neohaematopinus sciuropteri (Ont)

Tamias striatus griseus Mearns
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Megabothris acerbus (Ont)
M. asio megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Tamiophila grandis (Ont)

Tamias striatus lysteri (Richardson)
UNIRAMIA
DIPTERA
Cuterebra emasculator (unspecified)
SIPHONAPTERA
Epitedia w. wenmanni (Ont)
Megabothris acerbus (Ont)
Orchopeas h. howardi (Ont)
Tamiophila grandis (Ont)
Trichopsylla acerbus (Ont)

Tamias spp.
UNIRAMIA
SIPHONAPTERA
Megabothris acerbus (Man, Ont)
Orchopeas leucopus (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask)

SCIURIDAE OF UNDETERMINED SPECIES

Chipmunk
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC, Ont)
Eulaelaps stabularis (Ont)
Haemaphysalis leporis-palustris (BC)
Ixodes angustus (BC)
I. marxi (BC)
Laelaps pedalis (Ont)
UNIRAMIA
SIPHONAPTERA
Megabothris abantis (Alta, BC, YT)
M. acerbus (Man, Ont)
Monopsyllus e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
Opisodasys k. keeni (Alta, BC)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Tamiophila grandis (Ont)
Thrassis acamantis (Alta, BC)

Gopher
UNIRAMIA
DIPTERA

Cuterebra sp. (Sask)
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Foxella ignota recula (BC)

Groundhog
CHELICERATA
ACARI
Dermacentor andersoni (BC, Ont)
Haemaphysalis leporis-palustris (BC)
Ixodes cookei (BC, Ont)
Laelaps propheticus (Ont)
UNIRAMIA
SIPHONAPTERA
Siphonaptera gen. spp. (BC)
Thrassis acamantis (Alta, BC)

Ground squirrel
CHELICERATA
ACARI
Dermacentor andersoni (Alta, BC)
Ixodes sculptus (Sask)
UNIRAMIA
SIPHONAPTERA
Hystrichopsylla dippiei (Alta)
Neopsylla inopina (Alta)
Opisocrostis labis (Alta)
Rhadinopsylla fraterna (Alta)
Siphonaptera gen. spp. (BC)

Marmot
UNIRAMIA
SIPHONAPTERA
Siphonaptera gen. spp. (BC)

Red squirrel
UNIRAMIA
SIPHONAPTERA
Monopsyllus ciliatus protinus (BC)
M. e. eumolpi (Alta, BC, Man, NWT, Ont, Sask, YT)
M. vison (Alta, BC, Man, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas c. caedens (Alta, BC, Man, Que, YT)
O. c. durus (BC)

Squirrels
CHELICERATA
ACARI
Dermacentor andersoni (BC)
Gemasus spp. (Ont)
Haemaphysalis cinnabarina (BC)
H. leporis-palustris (Sask)
Ixodes angustus (BC)
I. californicus (BC)
I. cookei (BC)
I. marxi (BC, Ont)
I. spinipalpus (BC)
I. texanus (BC)
UNIRAMIA
SIPHONAPTERA
Ceratophyllus gallinae (Man)
Megarthroglossus p. procus (BC)
Monopsyllus ciliatus protinus (BC)
M. vison (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas caedens durus (Alta, BC, NB, Nfld, NWT, Ont, Que, Sask)
Tarsopsylla octodecimdentata coloradensis (Alta, BC, Man, NWT, Ont, Sask, YT)

Streator's red squirrel
CHELICERATA
ACARI
Liponyssus spp. (Ont)
Neoschongastia blarinae (BC)

Tree squirrel
CHELICERATA
ACARI
Dermacentor andersoni (Alta)
UNIRAMIA
SIPHONAPTERA
Orchopeas c. caedens (Alta, BC, Man, Que, YT)

Family ZAPODIDAE

Napaeozapus insignis (Miller) Woodland jumping mouse
CHELICERATA
ACARI
Androlaelaps fahrenholzi (NS, PEI)
Androlaelaps sp. (NS)
Dermacarus hypudaei (NS)
D. newyorkensis (NB, NS, PEI)
Dermacentor variabilis (NS)
Echinonyssus isabellinus (PEI)
Euryparasitus spp. (NB)
Gliricoptes zapus (NB)
Gliricoptes sp. (Que)
Glycyphagus hypudaei (NB)
Haemogamasus ambulans (NB)
Haemogamasus spp. (NS)
Ixodes angustus (NB)
I. muris (NS)
Laelaps kochi (NS, PEI)
Listrophorus mexicanus (NS, Que)
Miyatrombicula esoensis (PEI)
Myobia sp. (Que)
Neotrombicula harperi (NB, NS, PEI, Que)
N. microti (NS, Que)
Pygmephorus horridus (NB)
P. mahunkai (PEI)
Radfordia ewingi (NB, PEI)
Radfordia sp. (NB)
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (NS)
Megabothris a. asio (NS)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Orchopeas leucopus (Que)
Peromyscopsylla catatina (Man, NB, NS, Ont)

Stenoponia americana (NS)
SIPHUNCULATA
Enderleinellus nitschi (Que)

Napaeozapus insignis frutectanus Jackson
UNIRAMIA
SIPHONAPTERA
Megabothris quirini (Alta, BC, NWT, Ont)
Peromyscopsylla catatina (Ont)

Napeozapus insignis insignis (Miller)
CHELICERATA
ACARI
Ixodes muris (NS)
UNIRAMIA
SIPHONAPTERA
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla catatina (Man, Nfld, NS, Ont)
Stenoponia americana (Man, NS, Ont, Que)

Napaeozapus spp.
UNIRAMIA
SIPHONAPTERA
Ctenophthalmus p. pseudagyrtes (Alta, BC, Man, NB, NS, Ont, PEI, Que, Sask)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask,YT)

Zapus hudsonius (Zimmerman) Meadow jumping mouse
CHELICERATA
ACARI
Androlaelaps fahrenholzi (NB, NS, PEI)
Androlaelaps sp. (NS)
Dermacarus newyorkensis (NB, NS, PEI)
Dermacentor variabilis (Man, NS)
Echinonyssus isabellinus (PEI)
Haemogamasus ambulans (PEI)
Hyperlaelaps sp. (NS)
Ixodes angustus (NB)
I. muris (NB, NS, PEI)
Laelaspis sp. (NS)
Listrophorus mexicanus (PEI)
Myobiiidae gen. spp. (Ont)
Neotrombicula harperi (NB, NS, PEI, Que)
N. lipovskyi (NB)
N. microti (NS)
Ololaelaps sp. (NS)
Orycteroxenus soricis (NS)
Pygmephorus mahunkai (PEI)
Radfordia ewingi (NB)
Trombiculidae gen. spp. (Ont)
Xenoryctes latiporus (NB)
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Corrodopsylla c. curvata (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Megabothris abantis (Alta, BC, YT)
M. asio (NS)
M. a. asio (Nfld, Ont, Que, Sask, YT)
M. a. megacolpus (Alta, BC, Man, NWT, Ont, Que, Sask, YT)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT))
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)

Zapus hudsonius acadicus (Dawson)
CHELICERATA
ACARI
Dermacentor variabilis (NS)
Ixodes muris (NS)

Zapus hudsonius canadensis (Davies)
Syn.: *Zapus hudsonius ontarioensis* Anderson
CHELICERATA
ACARI
Androlaelaps fahrenholzi (Ont)
Haemogamasus hirsutus (Ont)

Zapus princeps Allen Western jumping mouse
UNIRAMIA
SIPHONAPTERA
Hystrichopsylla d. dippiei (Alta, Sask)
Megabothris quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Peromyscopsylla selenis (Alta, BC, Man, NWT, Sask, YT)

Zapus princeps idahoensis Davis
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Sask)
Megabothris abantis (Alta, BC)

Zapus princeps minor Preble
UNIRAMIA
SIPHONAPTERA
Epitedia w. wenmanni (Alta, BC, Man, NB, NWT, Ont, Sask)
Hystrichopsylla d. dippiei (Alta, Sask)
Megabothris quirini (Alta, BC, NWT, Ont)
Monopsyllus eumolpi (Alta, BC, Ont, Sask)

Zapus trinotatus trinotatus Rhoads Pacific jumping mouse
UNIRAMIA
SIPHONAPTERA
Hystrichopsylla o. occidentalis (BC)
Megabothris abantis (Alta, BC)

Zapus spp.
UNIRAMIA
SIPHONAPTERA
Catallagia decipiens (Alta, BC, Man, Sask, YT)
Corrodopsylla c. curvata (Alta)
Ctenophthalmus p. pseudagyrtes (Que)
Epitedia scapani (BC)
Malaraeus telchinus (Alta, BC)
Megabothris abantis (Alta, BC, YT)
M. a. asio (NB, Nfld, NS, Ont, PEI, Que)

M. a. megacolpus (Man)
M. quirini (Alta, BC, Man, NB, Nfld, NS, NWT, Ont, Que, Sask, YT)
Monopsyllus wagneri systaltus (Alta, Man, Ont, Sask)
M. w. wagneri (Alta, BC)
Opisodasys k. keeni (Alta, BC)
Peromyscopsylla selenis (Alta)

RODENTIA OF UNDETERMINED SPECIES

Rodents
CHELICERATA
ACARI
Dermacentor venustus (BC)
Ixodidae gen. sp. (Alta, BC)
UNIRAMIA
SIPHONAPTERA
Rectofrontia fraterna (BC)
Siphonaptera gen. spp. (BC)

MAMMALIA OF UNDETERMINED SPECIES

Mammalia gen. spp.
CHELICERATA
ACARI
Dermacentor albipictus (BC)
D. andersoni (Alta)
D. variabilis (NS)
Haemaphysalis expositicius (Man)
UNIRAMIA
DIPTERA
Cuterebra americana var. *polita* (BC)
C. fasciata (BC, NB)
C. similis (BC)
C. tenebrosa (BC)
SIPHONAPTERA
Nosopsyllus fasciatus (Ont)

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